

AD-A196 973

DTIC FILE COPY

3

Bibliography of Soviet Laser Developments

January - February 1987



Defense Intelligence Agency

DTIC
ELECTE
JUN 06 1988
S H D

DST-2700Z-001-88
~~February 1988~~

DISTRIBUTION STATEMENT A

Approved for public release;
Distribution Unlimited

BIBLIOGRAPHY OF SOVIET LASER DEVELOPMENTS

No. 87

JANUARY - FEBRUARY 1987

Date of Report

December 29, 1987

Vice Director for Foreign Intelligence
Defense Intelligence Agency

This document was prepared for the Defense Intelligence Agency under an intragovernment agreement. It is intended to facilitate access of government researchers to Soviet laser literature.

Comments should be addressed to the Defense Intelligence Agency, Directorate for Scientific and Technical Intelligence, ATTN: DT-5A

Approved for public release; distribution unlimited

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER DST-2700Z-001-88	2. GOVT ACCESSION NO.	3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle) BIBLIOGRAPHY OF SOVIET LASER DEVELOPMENTS, No. 87 JANUARY - FEBRUARY 1987		5. TYPE OF REPORT & PERIOD COVERED
7. AUTHOR(s)		6. PERFORMING ORG. REPORT NUMBER
9. PERFORMING ORGANIZATION NAME AND ADDRESS		8. CONTRACT OR GRANT NUMBER(s)
11. CONTROLLING OFFICE NAME AND ADDRESS Defense Intelligence Agency Directorate for Scientific and Technical Intelligence		10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office)		12. REPORT DATE December 29, 1987
		13. NUMBER OF PAGES 134
		15. SECURITY CLASS. (of this report) UNCLASSIFIED
16. DISTRIBUTION STATEMENT (of this Report) Approved for public release; distribution unlimited		15a. DECLASSIFICATION/DOWNGRADING SCHEDULE
17. Distribution Statement (of the abstract entered in Block 20, if different from report)		
18. Supplementary Notes		
19. KEY WORDS Solid State Lasers; Liquid Lasers; Gas Lasers; Chemical Lasers; Laser Components; Nonlinear Optics; Spectroscopy of Laser Materials; Ultrashort Pulse Generation; Free Electron Lasers; Laser Theory; Laser Biological Effects; Laser Communications; Laser Beam Propagation; Adaptive Optics; Laser Computer Technology; Holography; Laser Chemical Effects; Laser Parameters; Laser Measurement Applications; Laser-Excited Optical Effects; Laser Spectroscopy; Laser Beam-Target Interaction; Laser Plasma.		
20. ABSTRACT This is the Soviet Laser Bibliography for January-February 1987, and is No. 87 in a continuing series on Soviet Laser developments. The coverage includes basic research on solid state, liquid, gas, and chemical lasers; components; nonlinear optics; spectroscopy of laser materials; ultrashort pulse generation; theoretical aspects of advanced lasers; and general laser theory. Laser applications are listed under biological effects; communications systems; beam propagation; adaptive optics; computer technology; holography; laser-induced chemical reactions; measurement of laser parameters; laser measurement applications; laser-excited optical effects; laser spectroscopy; beam-target interaction; and plasma generation and diagnostics.		

DD FORM 1 JAN 73 1473 EDITION OF 1 NOV 65 IS OBSOLETE

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

INTRODUCTION

This bibliography has been compiled under an interagency agreement as a continuing effort to document current Soviet-bloc developments in the quantum electronics field. The period covered is January-February 1987, and includes all significant laser-related articles received by us in that interval. The bulk of the entries come from the approximately 30 periodicals which are known to publish the most significant findings in Soviet laser technology. Citations from the Soviet Reference Journals (journals of abstracts) are also included. Laser items from the popular or semipopular press are generally omitted. All sources cited with no parenthetical notation are available at the Library of Congress. A parenthetical entry indicates the secondary source in which the citation was found as a bibliographic entry or abstract, but for which the original source is not currently available at the Library.

Since our computer is not now able to print between lines, superscripts and subscripts are indicated by (sup) and (sub).

We are producing the entire bibliography on computer. To make our bibliography compatible with other data bases, for source abbreviations, we use the letter codens generally used in our own government rather than transliterations of abbreviations used in the Soviet Union. Likewise, we use letter codens to designate affiliations. The authors' affiliations are indicated in parentheses after the authors' names in the text. Empty parentheses indicate that the affiliation was not given. A source abbreviations list, authors' affiliations list, and author index are included in the back of the bibliography.



Accession For	
NTIS GRA&I	<input checked="checked" type="checkbox"/>
DTIC TAB	<input type="checkbox"/>
Unannounced	<input type="checkbox"/>
Justification	
By	
Distribution/	
Availability Codes	
Dist	Avail and/or Special
A-1	

SOVIET LASER BIBLIOGRAPHY, JANUARY-FEBRUARY 1987

TABLE OF CONTENTS

I. BASIC RESEARCH

A. Solid State Lasers

1. Crystal

a. Miscellaneous	1
b. Ruby	---
c. LiF	2

2. Rare Earth

a. Miscellaneous	---
b. Nd ³⁺	2
c. Er ³⁺	4
d. Ho ³⁺	---
e. Tm ³⁺	---

3. Semiconductor

a. Theory	4
b. Miscellaneous Homojunction	---
c. Miscellaneous Heterojunction	5
d. GaAs	5
e. CdS	---
f. ZnSe	---
g. Pb(1-x)Sn(x)Te	---
h. InGaAsP	6

4. Glass	
a. Miscellaneous	6
b. Nd	6
c. Er	---
B. Liquid Lasers	
1. Organic Dyes	
a. Miscellaneous	7
b. Rhodamine	7
c. Polymethine	8
d. Coumarin	---
e. Phthalimide	---
f. Cyanine	---
g. Xanthene	---
h. POPOP	---
2. Inorganic Liquids	---
C. Gas Lasers	
1. Theory	8
2. Simple Mixtures	
a. Miscellaneous	10
b. He-Ne	10
c. He-Xe	---
d. He-Kr	---
e. Ar-Xe	12

3. Molecular Beam and Ion	
a. Miscellaneous	12
b. Carbon Dioxide	13
c. Carbon Monoxide	18
d. Noble Gas	18
e. Nitrogen	19
f. Iodine	19
g. Hydrogen	20
h. Ammonia	20
i. Carbon Tetrafluoride	---
j. Nitrous Oxide	---
k. Water Vapor.....	---
l. Heavy-Water Vapor	---
m. Submillimeter	---
n. Metal Vapor	20
o. Gasdynamic	23
4. Excimer	24
5. Dye Vapor	25
D. Chemical Lasers	
1. Miscellaneous	25
2. Fluorine + Hydrogen (Deuterium)	26
3. Photodissociation	26
4. Transfer	---
5. Oxygen + Iodine	---
6. Carbon Disulfide + Oxygen	---
7. Sulfur Hexafluoride + Hydrogen	---

E. Components

1. Miscellaneous	27
2. Resonators	
a. Design and Performance	27
b. Mode Kinetics	28
3. Pump Sources	28
4. Cooling Systems	29
5. Deflectors	---
6. Attenuators	---
7. Collimators	---
8. Diffraction Gratings	29
9. Focusers	29
10. Windows	30
11. Polarizers	30
12. Beam Shapers	30
13. Lenses	---
14. Filters	30
15. Beam Splitters	30
16. Mirrors	31
17. Detectors	32
18. Modulators	33

F. Nonlinear Optics	
1. General Theory	33
2. Frequency Conversion	38
3. Parametric Processes	38
4. Stimulated Scattering	
a. Miscellaneous Scattering	39
b. Raman	39
c. Brillouin	40
d. Rayleigh	40
5. Self-focusing	---
6. Acoustic Interaction	40
G. Spectroscopy of Laser Materials	42
H. Ultrashort Pulse Generation	43
J. Crystal Growing	---
K. Theoretical Aspects of Advanced Lasers ..	43
L. General Laser Theory	44

II.	LASER APPLICATIONS	
A.	Biological Effects	46
B.	Communications Systems	46
C.	Beam Propagation	
1.	Theory	51
2.	Propagation in the Atmosphere	54
3.	Propagation in Liquids	56
4.	Adaptive Optics	57
D.	Computer Technology	60
E.	Holography	61
F.	Laser-Induced Chemical Reactions	62
G.	Measurement of Laser Parameters	64
H.	Laser Measurement Applications	
1.	Direct Measurement by Laser	70
2.	Laser-Excited Optical Effects	80
3.	Laser Spectroscopy	84
J.	Beam-Target Interaction	
1.	Miscellaneous Targets	94
2.	Metal Targets	96
3.	Dielectric Targets	99
4.	Semiconductor Targets	99
K.	Plasma Generation and Diagnostics	101
III.	MONOGRAPHS, BOOKS, CONFERENCE PROCEEDINGS ..	103
IV.	SOURCE ABBREVIATIONS	109
V.	AUTHOR AFFILIATIONS	113
VI.	AUTHOR INDEX	123

I. BASIC RESEARCH

A. SOLID STATE LASERS

1. Crystal

a. Miscellaneous

1. Kaminskiy, A.A.; Belokoneva, Ye.L.; Mill', B.V.; Sarkisov, S.E.; Kurbanov, K. (). Crystal structure, absorption, luminescence properties and stimulated emission in Ga gehlenite $[\text{Ca}(2-x)\text{Nd}(x)\text{Ga}(2+x)\text{Si}(1-x)\text{O}(\text{sub}7)]$ (in English). PSSAB, v. A97, no. 1, 1986, 279-290. (RZFZA, 87/2L991).
2. Kolerov, A.N. (VNIFTRI). Anomaly of the radiation spectrum and pulse kinetics of lasing in a $\text{BeAl}(\text{sub}2)\text{O}(\text{sub}4):\text{Cr}(\text{sup}3+)$ laser crystal. PZTFD, no. 4, 1987, 227-231.
3. Noginov, M.A.; Ostroumov, V.G.; Saidov, Z.S.; Smirnov, V.A.; Shcherbakov, I.A. (IOF). Excitation distribution in disordered systems of strongly interacting particles. IOF. Preprint, no. 193, 1986, 18 p. (RZFZA, 87/1L508).
4. Noginov, M.A.; Privis, Yu.S.; Saidov, Z.S.; Smirnov, V.A.; Shcherbakov, I.A. (IOF). Temperature dependence of the probability of the $(\text{sup}4)\text{A}(\text{sub}2)$ to $(\text{sup}4)\text{T}(\text{sub}2)$ transition of Cr^{3+} ions in yttrium scandium gallium garnet crystals. IOF. Preprint, no. 196, 1986, 10 p. (RZFZA, 87/2L329).
5. Ostroumov, V.G.; Privis, Yu.S.; Saidov, Z.S.; Smirnov, V.A.; Shcherbakov, I.A. (IOF). Mechanisms of energy transfer from chromium ions to erbium ions in yttrium scandium gallium garnet crystals. IOF. Preprint, no. 194, 1986, 12 p. (RZFZA, 87/1L536).
6. Saidov, Z.S.; Smirnov, V.A.; Shcherbakov, I.A. (IOF). Gain at 1.5 and 3 μm in chromium- and erbium-doped yttrium scandium gallium garnet crystals. IOF. Preprint, no. 195, 1986, 10 p. (RZRAB, 87/1Ye203).
7. Vazhenin, V.A.; Nikiforov, A.Ye.; Sevast'yanov, B.K.; Starichenko, K.M.; Shevchenko, A.K.; Sherstkov, Yu.A. (IKAN). Pseudo-Stark effect in the paramagnetic resonance of Cr^{3+} ions in alexandrite. FTVTA, no. 2, 1987, 627-629.

8. Zharikov, Ye.V.; Zavartsev, Yu.D.; Nikol'skiy, M.Yu.; Prokhorov, A.M.; Studenikin, P.A.; Umyskov, A.F.; Shcherbakov, I.A. (IOF). Acoustooptic modulation of a gadolinium scandium gallium garnet:Cr,Nd laser operating at high pumping energies. IOF. Preprint, no. 199, 1986, 6 p. (RZFZA, 87/2L987).
- b. Ruby
- c. LiF
9. Al'tshuler, G.B.; Okishev, A.V.; Shkadarevich, A.P. (LITMO). Lasing of a giant pulse in a LiF laser with F(sub2-) centers during the modulation of amplification by a train of ultrashort pulses. ZTEFA, no. 1, 1987, 161-163.
10. Asayenok, N.A.; Vasil'yev, N.N.; Dudchik, Yu.I.; Shkadarevich, A.P.; Ekmanis, Yu.A. (). Inactive absorption in LiF crystals with F(sub2)(sup-) color centers. OPSPA, vol. 62, no. 2, 1987, 381-385.
11. Ivanov, N.A.; Inshakov, D.V.; Khulugurov, V.M. (). Infrared luminescence of irradiated LiF crystals with oxygen-containing impurities. ZPSBA, v. 46, no. 1, 1987, 136-138.
12. Ivanov, N.A.; Lokhnygin, V.D.; Fomichev, A.A.; Khulugurov, V.M.; Chernyago, B.P. (). Losses during the lasing of F(sub2)(sup+) centers in LiF crystals. ZPSBA, v. 46, no. 2, 1987, 207-211.

2. Rare Earth

- a. Miscellaneous
- b. Nd3+
13. Antipenko, B.M.; Voronin, S.P.; Privalova, T.A. (). Anti-Stokes conversion of the radiation of a neodymium laser based on cooperative processes. ZTEFA, no. 2, 1987, 349-350.
14. Apanasevich, P.A.; Kvach, V.V.; Koptev, V.G.; Orlovich, V.A.; Stavrov, A.A.; Shkadarevich, A.P. (IFANB). High-power laser system based on a repetitively pulsed YAG:Nd3+ laser with an unstable telescopic resonator and two-stage amplifier. KVEKA, no. 2, 1987, 265-270.

15. Astakhov, A.V.; Butusov, M.M.; Galkin, S.L.; Yermakova, N.V.; Fedorov, Yu.K. (). Fiber laser with a 1.54 μm radiation wavelength. OPSPA, vol. 62, no. 1, 1987, 230-232.
16. Belashenkov, N.R.; Inochkin, M.V.; Karasev, V.B. (LITMO). Nd³⁺:YAG laser to study fast-flow processes. PRTEA, no. 1, 1987, 186-188.
17. Borodulenko, G.P.; Bykovskiy, Yu.A.; Kirillovich, A.A.; Ponomarev, N.M.; Pukhliy, Zh.A. (IOF). Characteristics of cathode-luminescence of neodymium in lanthanum oxosulfide. PZTFD, no. 2, 1987, 101-105.
18. Demchuk, M.I.; Zharikov, Ye.V.; Zabaznov, A.M.; Manichev, I.A.; Mikhaylov, V.P.; Prokhorov, A.M.; Shkadarevich, A.P.; Chernyakovskiy, A.F.; Shcherbakov, I.A.; Yumashev, K.V. (IOF). Mode locking in a neodymium laser with a shutter made of gadolinium-scandium-gallium garnet. KVEKA, no. 2, 1987, 432-424.
19. Fedorov, V.B.; Fomenkov, I.V. (FIAN). Spectrum narrowing of quasi-c-w lasing in a neodymium laser with a plasma mirror. KRSFA, no. 1, 1987, 36-38.
20. Fedorov, V.B.; Fomenkov, I.V. (IOF). Dynamics in the formation of a plasma mirror in a neodymium laser by the secondary optical breakdown of air. IOF. Preprint, no. 181, 1986, 12 p. (RZFZA, 87/2G458).
21. Kaminskiy, A.A.; Mill', B.V.; Belokoneva, Ye.L.; Butashin, A.V.; Sarkisov, S.E.; Kurbanov, K.; Khodzhabagyan, G.G. (IKAN; MGU). Crystal structure, luminescence intensity characteristics and stimulated emission in disordered LaSr(sub2)Ga(sub11)O(sub20)-Nd³⁺ gallate. IVNMA, no. 11, 1986, 1869-1873.
22. Korniyenko, L.S.; Kravtsov, N.V.; Kir'yanov, A.V.; Sidorov, V.A.; Yatsenko, Yu.P. (NIIYaF). CW YAG:Nd laser with simultaneous passive and kinematic mode locking. KVEKA, no. 2, 1987, 425-426.
23. Leont'yev, V.M.; Novoselov, V.G.; Rudnitskiy, Yu.P.; Chernysheva, L.V. (IAE). Solid-state laser utilizing a composite active element and diffraction-limit beam divergence. KVEKA, no. 2, 1987, 364-368.

24. Lyubimov, V.V.; Poleshchuk, V.Ye.; Tarasov, A.A. (). Features of formation of the radiation pattern in a passive-shutter solid-state laser with an initial transmittance varying over the aperture. KVEKA, no. 2, 1987, 394-396.
25. Sarkisov, S.E.; Kaminskiy, A.A. (). Luminescence of Nd³⁺ ions in semiconductor Bi(sub12)GeO(sub20) crystals (in English). PSSAB, v. A95, no. 2, 1986, 641-649. (RZFZA, 87/1L537).
26. Yevdokimova, O.N.; Kaptsov, L.N. (MGU). Chaotic operating conditions and stability of the peak power of YAG:Nd³⁺ laser radiation during cavity loss modulation. KVEKA, no. 1, 1987, 146-150.
- c. Er³⁺
27. Kaminskiy, A.A. (). Stimulated emission spectroscopy of Er³⁺ ions in cubic [Y,Ln](sub3)Al(sub5)O(sub12) and monoclinic K[Y,Ln]W(sub2)O(sub8) single crystals (in English). PSSAB, v. A96, no. 2, 1986, K175-K179. (RZFZA, 87/2L990).
- d. Ho³⁺
- e. Tm³⁺

3. Semiconductor

- a. Theory
28. Bezhan, N.P.; Brynzar', V.I.; Gitsu, D.V.; Ivanov, M.B.; Popushoy, V.V.; Syrbu, A.V. (KPIA). Direct recording of amplification line shape in injection lasers. ZTEFA, no. 1, 1987, 168-170.
29. Dedushenko, K.B.; Zverkov, M.V.; Likhachev, I.G. (MIFI). Emission spectrum tuning in a C(sup3) [coupled-cleaved cavity] laser. KVEKA, no. 2, 1987, 342-350.
30. Murav'yev, A.V.; Nozdrin, Yu.N.; Pavlov, S.A.; Shastin, V.N. (IPF). Directional stimulated radiation of a Ge hot hole laser. PZTFD, no. 2, 1987, 65-68.

b. Miscellaneous Homojunction

c. Miscellaneous Heterojunction

31. Bogatov, A.P.; Yelisseyev, P.G.; Kobildzhanov, O.A.; Madgazin, V.R.; Khaydarov, A.V. (FIAN). Frequency of self-sustaining pulsations of radiation intensity in injection heterojunction lasers. KRSFA, no. 1, 1987, 16-17.
32. Goncharov, I.G.; Kirillovich, A.A. (MIFI). Semiconductor laser with electron-beam pumping and a waveguide output. KVEKA, no. 1, 1987, 94-99.
33. Henniger, U.; Wuensche, H.J. (). Approximate expression for the reflectivity of the fundamental TE mode in symmetric double heterostructure lasers (in English). ATPLB, v. A69, no. 5, 1986, 901-905. (RZFZA, 87/1L993).
34. Plyavenek, A.G.; Solodkov, A.F.; Yakubovich, S.D. (VNIIOFI). Transient process in an injection laser with a non-quasi-Fermi electron distribution function. KVEKA, no. 1, 1987, 71-75.
35. Shotov, A.P.; Selivanov, Yu.G. (FIAN). PbS/PbSSe/PbSnSe heterolasers with quantum dimensional effects in an active region. ZFPRA, vol. 45, no. 1, 1987, 5-7.
- d. GaAs
36. Gubarev, A.A.; Kozlovskiy, V.I.; Lavrushin, B.M.; Nasibov, A.S.; Reznikov, P.V. (FIAN). High-efficiency semiconductor laser with longitudinal pumping of gallium arsenide by a scanning electron beam. KVEKA, no. 1, 1987, 170-176.
37. Vaynshteyn, S.N.; Zhilyayev, Yu.V.; Levinshteyn, M.Ye. (FTI). Propagation of a switched state in gallium-arsenide thyristors. FTPPA, no. 1, 1987, 129-133.

- e. CdS
 - f. ZnSe
 - g. $\text{Pb}(1-x)\text{Sn}(x)\text{Te}$
 - h. InGaAsP
38. Akimova, I.V.; Drakin, A.Ye.; Durayev, V.P.; Yeliseyev, P.G.; Makhsudov, B.I.; Sverdlov, B.N. (FIAN). Defects of rapid degradation on facet mirrors of InGaAsP/InP lasers in the 1.3 μm region. KVEKA, no. 1, 1987, 204-205.
 39. Alferov, Zh.I.; Antonishkis, N.Yu.; Arsent'yev, I.N.; Garbuzov, D.Z.; Krasovskiy, V.V.; Tikunov, A.V.; Khalfin, V.B. (FTI). Quantum-dimensional InGaAsP/GaAs separately-limited double-heterostructure lasers produced by a liquid-epitaxy method at 0.79 μm , $I(\text{subpi})=124 \text{ A/cm}^2$, and $T=300 \text{ K}$. FTPPA, no. 1, 1987, 162-164.
 40. Kizhayev, K.Yu.; Kuksenkov, D.V.; Kuchinskiy, V.I.; Lazutka, A.S.; Nikishin, S.A.; Portnoy, Ye.L.; Smirnitskiy, V.B. (FTI). Features of time characteristics of the radiation of InGaAsP/InP injection lasers with quantum-dimensional active layers obtained by liquid epitaxy. PZTFD, no. 3, 1987, 141-146.
 41. Kulyuk, L.L.; Radautsan, S.I.; Russu, Ye.V.; Siminel, A.V.; Smirnov, V.G.; Strumban, E.Ye. (). Photoluminescence and laser emission in $\text{In}(0.53)\text{Ga}(0.47)\text{As}/\text{InP}$ layers (in English). PSSAB, v. A96, no. 1, 1986, 289-293. (RZRAB, 87/2Yel69).

4. Glass

- a. Miscellaneous
42. Barna, S.; Ionescu, E.H.; Lancranjan, I. (). L.P.17.62 laser phosphate glass (in Romanian). SCEFA, no. 7, 1986, 630-640. (RZFZA, 87/2L978).
- b. Nd
43. Ivanov, V.V.; Senatskiy, Yu.V.; Sklizkov, G.V. (FIAN). Numerical simulation of the dynamics of inversion depletion and the amplification of nanosecond pulses in neodymium glass. KVEKA, no. 2, 1987, 306-316.

44. Lancranjan, I. (). Effect of the sigma parameter on slow mechanical Q-switching [in Nd glass lasers] (in Romanian). SCEFA, no. 7, 1986, 669-677. (RZFZA, 87/2L979).

c. Er

B. LIQUID LASERS

1. Organic Dyes

a. Miscellaneous

45. Barikhin, B.A.; Barkovskiy, K.P.; Gerasimov, V.B.; Dudarevich, A.L.; Kudryavkin, Ye.V.; Naruta, V.Ye.; Nedolugov, V.I.; Orlov, V.K.; Petukhov, A.G.; Ral'chenko, V.I.; Chernomordin, A.I. (GrodGU). Increasing the directivity of radiation in a dye laser by a resonator with a retroreflecting mirror. ZTEFA, no. 2, 1987, 402-404.
46. Chesnulyavichyus, I.I. (IFANB). Picosecond dye lasers with photoinduced feedback. IFANB. Dissertation, 1986, 17 p. (Tochnyye izmereniya i kvantovaya elektronika, no. 39, VNIIM, 1987, 429).
47. Korobov, A.M.; Nikolayev, S.V. (IRFEANuk). Flashlamp-excited high-power broadband organic-compound laser with improved spatial angular characteristics. IRFEANuk. Preprint, no. 300, 1986, 31 p. (RZFZA, 87/1L958).
48. Maslov, V.V.; Dzyubenko, M.I.; Nikitchenko, V.M. (IRFEANuk). Study on new dyes for flashlamp-pumped lasers. IRFEANuk. Preprint, no. 299, 27 p. (RZRAB, 87/1Ye135).

b. Rhodamine

49. Bogdankevich, O.V.; Zverev, M.M.; Krasavina, Ye.M.; Kryukova, I.V.; Pevtsov, V.F. (VNITsISPIV). Dye lasers pumped by radiation from high-power semiconductor lasers. KVEKA, no. 1, 1987, 218-220.
50. Burakov, V.S.; Zhukovskiy, V.V.; Isayevich, A.V. (). Spectrum locking of the radiation of a dye laser to absorption lines of the atoms of a plasma of a pulsed discharge. ZPSBA, v. 46, no. 2, 1987, 189-195.
51. Levin, M.B.; Reva, M.G.; Rodchenkova, V.V.; Uzhinov, B.M. (MGU). Mechanism of radiative energy transfer in lasing systems. KVEKA, no. 1, 1987, 27-32.

- c. Polymethine
- 52. Samtsov, M.P.; Butrimovich, O.V.; Voropay, Ye.S.; Ksenofontova, N.M. (BGUNIIFP). Role of singlet oxygen in the photochemistry of polymethine dyes. DBLRA, no. 1, 1987, 32-35.
- d. Coumarin
- e. Phthalimide
- f. Cyanine
- g. Xanthene
- h. POPOP

2. Inorganic Liquids

C. GAS LASERS

1. Theory

- 53. Basov, N.G.; Voytik, M.G.; Zuyev, V.S.; Klementov, A.D.; Kutakhov, V.P.; Pendyur, S.A. (FIAN). Efficiency of inert-gas/alkali ion molecules for stimulated emission in the ultraviolet and far ultraviolet spectral regions. KVEKA, no. 1, 1987, 185-187.
- 54. Dolgikh, V.A.; Kamrukov, A.S.; Kerimov, O.M.; Kozlov, N.P.; Protasov, Yu.S.; Soroka, A.M. (MVTU). Photoionization-recombination laser with wideband vacuum ultraviolet pumping by a heavy-current plasma-dynamic magnetoplasma compressor discharge. PZTFD, no. 4, 1987, 244-249.
- 55. Golger, A.L.; Klimovskiy, I.I.; Morozov, A.V. (). Possibility of developing efficient laser converters using optical pumping of a diatomic molecular gas in a mixture with buffer noble gas atoms. Inversnaya zaselenost' i generatsiya na perekhodakh v atomakh i molekulakh. CVSIZGPA, Tomsk, 1986. Tezisy dokladov. Part 1. Tomsk, 1986, 97-98. (RZRAB, 87/2Ye494).
- 56. Gudkov, A.A.; Kravchenko, V.F. (). Using acoustic flows to raise the average power of gas-discharge lasers. Inversnaya zaselenost' i generatsiya na perekhodakh v atomakh i molekulakh. CVSIZGPA, Tomsk, 1986. Tezisy dokladov. Part 1. Tomsk, 1986, 180. (RZRAB, 87/1Ye38).

57. Ivanov, V.A. (). Decaying plasma with molecular ions. KHPLD, no. 13, 1987, 74-114.
58. Korolenko, P.V.; Makarov, V.G. (MGU). Influence of an active medium on the spatial characteristics of waveguide lasing operation in gas lasers. KVEKA, no. 1, 1987, 76-79.
59. Kozin, G.I.; Konovalov, I.P.; Terekhin, A.V. (). Polarization resonance in two-mode trapping. Gazovyye lazery v metrologii. MIFI. Moskva, Energoatomizdat, 1986, 3-7. (Tochnyye izmereniya i kvantovaya elektronika, no. 39, VNIIM, 1987, 371).
60. Kulikov, V.V. (LGU). Ionizing compression waves in inert gases at medium pressures. LGU. Dissertation, 1986, 16 p. (Tochnyye izmereniya i kvantovaya elektronika, no. 39, VNIIM, 1987, 573).
61. Mashchenko, A.I.; Strokan', G.P.; Tolmachev, G.N. (). Effect of collisions of slow electrons on the formation of frequency dependence in lasers with a transverse radio-frequency discharge. Inversnaya zaselennost' i generatsiya na perekhodakh v atomakh i molekulakh. CVSIZGPA, Tomsk, 1986. Tezisy dokladov. Part 1. Tomsk, 1986, pp not given. (RZRAB, 87/1Ye63).
62. Ostapchenko, Ye.P.; Raykher, M.M.; Shevchenko, Yu.N. (). Laser [with a gas-discharge tubel. OTIZD, no. 24, 1986, 240135. (RZRAB, 87/1Ye127).
63. Pestov, E.G. (FIAN). Theory of ring lasers lasing in two-modes. Lazery na parakh metallov i ikh galogenidov. FIAN. Trudy, no. 181, 1987, 180-192.
64. Ponomarev, D.I.; Dubovskiy, P.Ye.; Lotkova, E.N.; Sobolev, N.N. (FIAN). Output power of gas-discharge lasers under different mechanisms of spectral line broadening. KRSFA, no. 2, 1987, 15-17.
65. Ponomarev, D.I.; Dubovskiy, P.Ye.; Lotkova, E.N.; Sobolev, N.N. (FIAN). Output power of gas-discharge lasers under various mechanisms of spectral line broadening. FIAN. Preprint, no. 302, 1986, 6 p. (RZFZA, 87/2L936).
66. Sologub, V.P.; Katkova, E.I.; Shishov, S.I. (). Study on the dynamic characteristics of a glow discharge plasma [in a gas-discharge laser]. Elektronnyye vozbuzhdeniya i strukturnyye defekty kristallov. Khabarovsk, 1986, 95-98. (RZFZA, 87/2G457).

67. Vargin, A.N.; Popov, A.I.; Sadchikhin, A.V. (). Time relaxation law of populations of laser levels coupled by collisional exchange. ZPSBA, v. 46, no. 2, 1987, 307-310.
68. Vas'kov, V.A.; Gonchukov, S.A.; Kurbatov, Ye.V. (). Two-mode lasing in two-isotope gas lasers. Gazovyye lazery v metrologii. MIFI. Moskva, Energoatomizdat, 1986, 8-18. (Tochnyye izmereniya i kvantovaya elektronika, no. 39, VNIIM, 1987, 338).

2. Simple Mixtures

a. Miscellaneous

69. Derzhiyev, V.I.; Koval', N.N.; Mesyats, G.A.; Prokhorov, A.M.; Skakun, V.S.; Tarasenko, V.F.; Tolkachev, V.S.; Fomin, Ye.A.; Yakovlenko, S.I. (IOF; ISE). Effect of SF(sub6) additions on the efficiency of an infrared xenon laser emission. KVEKA, no. 2, 1987, 427-428.
70. Molevich, N.Ye.; Orayevskiy, A.N. (FIAN; KGPI). Vibrational-rotational relaxation of the simplest hydrogen-containing molecules (review). KHVKA, no. 1, 1987, 3-16.
71. Vereshchagin, N.M.; Kozlov, B.A. (). Energy parameters of periodic pulsed electric-discharge lasers at atmospheric pressure using He:Ar, He:Kr and He:Xe mixtures. Inversnaya zaselennost' i generatsiya na perekhodakh v atomakh i molekulakh. CVSIZGPA, Tomsk, 1986. Tezisy dokladov. Part 1. Tomsk, 1986, 181-182. (RZRAB, 87/1Ye41).
72. Zagrebin, A.L.; Pavlovskaya, N.A. (). Interaction of Ne(3s), Ar(4s), Kr(5s), and Xe(6s)+He atoms. Diffusion of excited atoms in mixtures of inert gases with helium. OPSPA, vol. 62, no. 1, 1987, 27-33.
73. Zagrebin, A.L.; Pavlovskaya, N.A. (). Interaction of Ar(4s), Kr(5s), and Xe(6s)+Ne atoms. Diffusion of excited atoms in mixtures of inert gases with neon. OPSPA, vol. 62, no. 2, 1987, 264-272.

b. He-Ne

74. Abramov, V.P.; Mazan'ko, I.P.; Ulanov, Ye.A. (). Radial distribution of gain in a helium-neon plasma at 0.63 um under a transverse microwave discharge. RAELA, no. 10, 1986, 2038-2041.

75. Bagayev, S.N.; Klement'yev, V.M.; Chebotayev, V.P. (ITF). Measurement of the absolute frequency of a He-Ne/CH(sub4) laser. ZFPRA, vol. 45, no. 2, 1987, 67-69.
76. Fofanov, Ya.A. (). Investigation of natural power fluctuations of a He-Ne/(sup127)I(sub2) laser at 0.63 um. OPSPA, vol. 62, no. 1, 1987, 205-207.
77. Fofanov, Ya.A. (). Absorption in (sup127)I(sub2) in the 0.63 um range and the power contour of a He-Ne/(sup127)I(sub2) laser. OPSPA, vol. 62, no. 2, 1987, 419-422.
78. Gryaznevich, V.P.; Fofanov, Ya.A. (). Natural intensity fluctuations in a He-Ne laser. Comparison of quantum and semiclassical theories with the experiment. OPSPA, vol. 62, no. 2, 1987, 412-418.
79. Gubin, M.A.; Nikitin, V.V.; Nikul'chin, A.V.; Protsenko, Ye.D.; Tyurikov, D.A.; Shelkovnikov, A.S. (FIAN). Spectroscopic studies on frequency resonances with a width of 1-10 kilohertz in two-mode He-Ne/CH(sub4) lasers. FIAN. Preprint, no. 278, 1986, 33 p. (RZFZA, 87/2L937).
80. Kireyev, S.V.; Shevchenko, V.G. (). Temperature effects on frequency resonances in a two-mode He-Ne/I(sub2) laser with a phase anisotropic resonator. Gazovyye lazery v metrologii. MIFI. Moskva, Energoatomizdat, 1986, 24-28. (Tochnyye izmereniya i kvantovaya elektronika, no. 39, VNIIM, 1987, 616).
81. Kireyev, S.V.; Shevchenko, V.G. (). Possibilities for two-mode metrological He-Ne/I(sub2) lasers. Gazovyye lazery v metrologii. MIFI. Moskva, Energoatomizdat, 1986, 40-44. (Tochnyye izmereniya i kvantovaya elektronika, no. 39, VNIIM, 1987, 619).
82. Kositsyn, V.Ye.; Timashov, A.V. (TyUGU). Power stabilizer for a helium-neon laser. PRTEA, no. 1, 1987, 190-191.
83. Privalov, V.Ye.; Tkachenko, L.P. (GOI). Absorbing cell of a He-Ne/I(sub2) laser. OPMPA, no. 1, 1987, 58-59.
84. Sukhanov, I.I.; Troitskiy, Yu.V.; Yakushkin, S.V. (). Investigation of a He-Ne laser, generating a beam with a ring-shaped distribution of intensity. AVMEB, no. 1, 1987, 59-64.

85. Tokareva, I.P.; Kolomnikov, Yu.D. (). Output characteristics and parameters of the resonance of a He-Ne/¹²⁷I₂ laser. IZTEA, no. 1, 1987, 19-20.
86. Tselinko, A.M. (IFANUK). Experimental studies on frequency-stabilized He-Ne lasers in the visible range with intracavity absorption cells. IFANUK. Dissertation, 1986, 12 p. (Tochnyye izmereniya i kvantovaya elektronika, no. 39, VNIIM, 1987, 625).
87. Yemets, Ye.P.; Yermachenko, V.M. (). Optimization of the parameters of two-mode He-Ne lasers at 0.63 μ m. Gazovyye lazery v metrologii. MIFI. Moskva, Energoatomizdat, 1986, 32-40. (Tochnyye izmereniya i kvantovaya elektronika, no. 39, VNIIM, 1987, 367).
- c. He-Xe
- d. He-Kr
- e. Ar-Xe
88. Basov, N.G.; Baranov, V.V.; Danilychev, V.A.; Dudin, A.Yu.; Zayarnyy, D.A.; Merkulov, D.G.; Romanov, A.V.; Semenova, L.V.; Ustinovskiy, N.N.; Kholin, I.V.; Chugunov, A.Yu. (FIAN). High-power electroionization Ar-Xe laser with a divergence of $2.5-5 \times 10^{-5}$ radians. FIAN. Preprint, no. 254, 1986, 22 p. (RZFZA, 87/2L943).

3. Molecular Beam and Ion

- a. Miscellaneous
89. Basov, N.G.; Danilychev, V.A.; Drozhbin, Yu.A.; Zvorykin, V.D.; Lesnov, I.A.; Trofimenko, V.V.; Yarova, A.G. (FIAN). Experimental comparison of the beam divergence of pulsed electroionization CO and CO₂ lasers. KVEKA, no. 2, 1987, 337-341.
90. Vostrikov, V.G.; Loboyko, A.I.; Napartovich, A.P.; Naumov, V.G.; Taran, M.D.; Shachkin, L.V.; Shashkov, V.M. (). Localization of a non-self-sustained discharge in a given volume with the help of a variable-resistance anode. ZTEFA, no. 2, 1987, 268-272.

b. Carbon Dioxide

91. Agalakov, Yu.G.; Rubinov, Yu.A. (). High-power volumetric discharge in a mixture of $\text{CO}(\text{sub}2):\text{N}(\text{sub}2):\text{He}$ gases at atmospheric pressure. PZTFD, no. 2, 1987, 71-75.
92. Antipov, V.N.; Mikheyev, N.D.; Fishman, I.S. (). Determining the rotational temperature and level of losses by the lasing spectra of tunable CO_2 lasers. Inversnaya zaselennost' i generatsiya na perekhodakh v atomakh i molekulakh. CVSIZGPA, Tomsk, 1986. Tezisy dokladov. Part 1. Tomsk, 1986, 164. (RZRAB, 87/1Ye180).
93. Apollonov, V.V.; Akhunov, N.; Baytsur, G.G.; Kononov, I.G.; Firsov, K.N.; Yamshchikov, V.A. (). Characteristics of the active medium of CO_2 lasers. Inversnaya zaselennost' i generatsiya na perekhodakh v atomakh i molekulakh. CVSIZGPA, Tomsk, 1986. Tezisy dokladov. Part 1. Tomsk, 1986, 110. (RZRAB, 87/1Ye21).
94. Apollonov, V.V.; Baytsur, G.G.; Minenkov, V.R.; Prokhorov, A.M.; Semkin, B.V.; Firsov, K.N.; Shubin, B.G.; Yushin, A.V. (IOF; NIIVN). Large-aperture CO_2 amplifier. KVEKA, no. 1, 1987, 220-221.
95. Apollonov, V.V.; Baytsur, G.G.; Minenkov, V.R.; Prokhorov, A.M.; Semkin, B.V.; Firsov, K.N.; Shubin, B.G.; Yushin, A.V. (). Large-aperture CO_2 amplifier. Inversnaya zaselennost' i generatsiya na perekhodakh v atomakh i molekulakh. CVSIZGPA, Tomsk, 1986. Tezisy dokladov. Part 1. Tomsk, 1986, 106. (RZRAB, 87/2Ye35).
96. Apollonov, V.V.; Baytsur, G.G.; Prokhorov, A.M.; Firsov, K.N. (IOF). Formation of a self-sustained volume discharge for CO_2 laser pumping. KVEKA, no. 1, 1987, 135-145.
97. Babayev, I.K.; Golubev, V.S.; Vasil'tsov, V.V.; Zabelin, A.M.; Koterov, V.N.; Medvedev, D.K.; Cheburkin, N.V.; Chekin, S.K. (NITsTLAN). Investigation of energy characteristics of a c-w flow-through electric-discharge CO_2 amplifier. KVEKA, no. 2, 1987, 410-412.
98. Bakayev, D.S.; Yermachenko, V.M.; Petrovskiy, V.N.; Protsenko, Ye.D.; Rurukin, A.N.; Shanenin, R.A. (MIFI). Dual-mode lasing in a CO_2 laser. IVYRA, no. 1, 1987, 114-117.

99. Belousova, I.M.; Glukhikh, I.V.; Dutov, A.I.; Chirkov, V.N.; Yachnev, I.L. (). Spectral-energy characteristics of the radiation of an electroionization (supl3)C(supl6)O(sub2) laser. KVEKA, no. 2, 1987, 378-381.
100. Berezovskiy, V.V.; Gergel', I.V.; Igumnov, Ye.A.; et al. (). Multifrequency lasing in pulsed CO2 lasers at the P and R branch lines of rotational-vibrational transitions of the CO2 molecule. G azovyye lazery v metrologii. MIFI. Moskva, Energoatomizdat, 1986, 71-74. (Tochnyye izmereniya i kvantovaya elektronika, no. 39, VNIIM, 1987, 361).
101. Bertel', I.M.; Petukhov, V.O.; Pivovarchik, V.F.; Tochitskiy, S.Ya.; Churakov, V.V. (). Stabilized CO2 laser, lasing at 600 lines in the 9-11.8 um range. Inversnaya zaselennost' i generatsiya na perekhodakh v atomakh i molekulakh. CVSIZGPA, Tomsk, 1986. Tezisy dokladov. Part 1. Tomsk, 1986, 107. (RZRAB, 87/1Ye185).
102. Bychkov, Yu.I.; Karpov, V.M.; Konev, Yu.G.; Orlovskiy, V.M.; Osipov, V.V. (). Compact periodic pulsed CO2 laser excited by a non-self-sustained discharge. Inversnaya zaselennost' i generatsiya na perekhodakh v atomakh i molekulakh. CVSIZGPA, Tomsk, 1986. Tezisy dokladov. Part 1. Tomsk, 1986, 108-109. (RZRAB, 87/1Ye20).
103. Bykov, A.D.; Galushkin, M.G.; Lyakishev, V.G.; Rodionov, V.I.; Seregin, A.M.; Cheburkin, N.V.; Ulenikov, O.N. (). Effect of the isotopic composition in the active medium on the radiation parameters of CO2 lasers. Inversnaya zaselennost' i generatsiya na perekhodakh v atomakh i molekulakh. CVSIZGPA, Tomsk, 1986. Tezisy dokladov. Part 1. Tomsk, 1986, 121. (RZRAB, 87/1Ye19).
104. Bykov, A.D.; Galushkin, M.G.; Seregin, A.M.; Ulenikov, O.N.; Cheburkin, N.V. (). Optical inhomogeneities due to vibrational excitation of molecules in the active medium of CO2 lasers. Inversnaya zaselennost' i generatsiya na perekhodakh v atomakh i molekulakh. CVSIZGPA, Tomsk, 1986. Tezisy dokladov. Part 1. Tomsk, 1986, 103. (RZRAB, 87/2Ye34).

105. Bykov, A.D.; Galushkin, M.G.; Zarubin, P.V.; Lyakishev, V.G.; Rodionov, V.I.; Seregin, A.M.; Ulenikov, O.N.; Ustinov, N.D.; Cheburkin, N.V. (IOA). Theoretical investigation of the spectrum of stimulated emission from a pulsed electroionization (supl2)C(supl8)O(sub2) laser. KVEKA, no. 1, 1987, 158-163.
106. Fedorov, S.V.; Yur'yev, M.S. (). Propagation of an intensity-modulated laser beam through a pulsed CO2 amplifier. KVEKA, no. 1, 1987, 122-127.
107. Galeyev, I.G.; Timerkayev, B.A. (). Calculating the plasma parameters of a longitudinal glow discharge in the flow of a CO2-N2-He-CO mixture. Inversnaya zaselennost' i generatsiya na perekhodakh v atomakh i molekulakh. CVSIZGPA, Tomsk, 1986. Tezisy dokladov. Part 1. Tomsk, 1986, 124-125. (RZRAB, 87/1Ye42).
108. Galeyev, I.G.; Timerkayev, B.A. (). Population inversion at vibrational levels of CO2 molecules in a glow discharge in an electronegative gas mixture flow. Inversnaya zaselennost' i generatsiya na perekhodakh v atomakh i molekulakh. CVSIZGPA, Tomsk, 1986. Tezisy dokladov. Part 1. Tomsk, 1986, 126-127. (RZRAB, 87/1Ye43).
109. Gerasimchuk, A.G.; Kornilov, S.T. (). Gain in the radio-frequency discharge plasma from waveguide CO2 lasers. Inversnaya zaselennost' i generatsiya na perekhodakh v atomakh i molekulakh. CVSIZGPA, Tomsk, 1986. Tezisy dokladov. Part 1. Tomsk, 1986, 157-158. (RZRAB, 87/1Ye18).
110. Gerasimchuk, A.G.; Zamuruyev, S.N.; Kornilov, S.T. (). Waveguide CO2 amplifier with radio-frequency excitation of the active medium. Gazovyye lazery v metrologii. MIFI. Moskva, Energoatomizdat, 1986, 55-58. (Tochnyye izmereniya i kvantovaya elektronika, no. 39, VNIIM, 1987, 383).
111. Glukhikh, I.V.; Goryachkin, D.A.; Dutov, A.I.; Kalinin, V.P.; Kozlovskaya, I.M.; Chirkov, V.N.; Sherstobitov, V.Ye. (). Effect of the length of an unstable resonator on the divergence of radiation of a CO2 laser at atmospheric pressure. PZTFD, no. 4, 1987, 240-244.

112. Golovitskiy, A.P.; Kruzhalov, V.A.; Perchanok, T.M. (). Determining the parameters of a glancing microwave discharge used for preionization of the active medium of CO₂ lasers. Inversnaya zaselennost' i generatsiya na perekhodakh v atomakh i molekulakh. CVSIZGPA, Tomsk, 1986. Tezisy dokladov. Part 1. Tomsk, 1986, 104-105. (RZRAB, 87/2Ye36).
113. Golubev, V.S.; Kokora, A.N.; Ul'yanov, V.A. (NITsTLAN). Practical aspects of using IR transparent materials in industrial CO₂ lasers. NITsTLAN. Preprint, no. 14, 1986, 32 p. (RZFZA, 87/1L675).
114. Karlov, N.V.; Kisletsov, A.V.; Kovalev, I.O.; Kuz'min, G.P.; Nesterenko, A.A.; Khokhlov, E.M. (IOF). Continuously frequency-tunable high-pressure CO₂ laser with a plasma cathode. KVEKA, no. 1, 1987, 216-218.
115. Kuntsevich, B.F. (IFANB). Effect of vibrational excitation on the sweep frequency of pulsed CO₂ lasers. IFANB. Preprint, no. 439, 1986, 18 p. (RZFZA, 87/2L945).
116. Kuntsevich, B.F.; Churakov, V.V. (). Sweep frequencies of CO₂ lasers at atmospheric pressure following change in population inversion. Inversnaya zaselennost' i generatsiya na perekhodakh v atomakh i molekulakh. CVSIZGPA, Tomsk, 1986. Tezisy dokladov. Part 1. Tomsk, 1986, 162-163. (RZRAB, 87/1Ye16).
117. Kuntsevich, B.F.; Malyuta, D.D.; Mezhevov, V.S.; Napartovich, A.P.; Strel'tsov, A.P.; Churakov, V.V. (IFANB). Theoretical investigation of change in the frequency of atmospheric-pressure CO₂ laser radiation during an emission pulsed flow. KVEKA, no. 2, 1987, 328-336.
118. Kurochkin, V.Yu.; Petrovskiy, V.N.; Rurukin, A.N. (). Power resonances in a single-mode CO₂ laser with an intraresonator SF₆ cell. Gazovyye lazery v metrologii. MIFI. Moskva, Energoatomizdat, 1986, 49-54. (Tochnyye izmereniya i kvantovaya elektronika, no. 39, VNIIM, 1987, 621).
119. Minin, V.V.; Romanov, L.A.; Yatsenko, B.P. (). Study on the heating kinetics of the active medium in a pulse in an electroionization CO₂ laser at atmospheric pressure. Inversnaya zaselennost' i generatsiya na perekhodakh v atomakh i molekulakh. CVSIZGPA, Tomsk, 1986. Tezisy dokladov. Part 1. Tomsk, 1986, 186-187. (RZRAB, 87/1Ye23).

120. Orlovskiy, V.M.; Osipov, V.V.; Poteryayev, A.G.; Suslov, A.I. (). Operation of a sealed-off pulsed electroionization CO₂ laser. Inversnaya zaselennost' i generatsiya na perekhodakh v atomakh i molekulakh. CVSIZGPA, Tomsk, 1986. Tezisy dokladov. Part 1. Tomsk, 1986, 166-167. (RZRAB, 87/1Ye126).
121. Pavlovskiy, A.I.; Basmanov, V.F.; Bosamykin, V.S.; Gorokhov, V.V.; Karelin, V.I.; Repin, P.B. (). Electric-discharge CO(sub2) laser with an active volume of 0.28 cubic meters KVEKA, no. 2, 1987, 428-430.
122. Petukhov, V.O.; Solodukhin, A.S.; Starovoytov, V.S. (). Kinetics of vibrational temperatures in the active medium of a CO₂ laser which contains isotope-substituted CO₂ molecules. Fizicheskaya gazodinamika: eksperimental'noye modelirovaniye i diagnostika. ITMO. Minsk, 1985, 119-127. (Tochnyye izmereniya i kvantovaya elektronika, no. 39, VNIIM, 1987, 356).
123. Petukhov, V.O.; Starovoytov, V.S.; Trushin, S.A.; Churakov, V.V. (). Study on the kinetics of vibrational temperatures in the active medium of CO₂ lasers containing isotope-substituted molecules of carbon dioxide and nitrogen. Inversnaya zaselennost' i generatsiya na perekhodakh v atomakh i molekulakh. CVSIZGPA, Tomsk, 1986. Tezisy dokladov. Part 1. Tomsk, 1986, 170. (RZRAB, 87/1Ye22).
124. Pivovar, V.A.; Zavoruyev, S.M.; Rakauskas, R.I.; Shulskus, Yu.K. (). Possibility of lasing at new wavelengths of the IR spectrum in the 1.7-3.7 um region at vibrational transitions of the CO₂ molecule at high pumping levels. Inversnaya zaselennost' i generatsiya na perekhodakh v atomakh i molekulakh. CVSIZGPA, Tomsk, 1986. Tezisy dokladov. Part 1. Tomsk, 1986, 188-189. (RZRAB, 87/1Ye25).
125. Vorontsov, S.S.; Grachev, G.N.; Khabibullin, A.Kh. (). Measuring the gain fields and consecutive temperatures in the active media of industrial CO₂ lasers. Inversnaya zaselennost' i generatsiya na perekhodakh v atomakh i molekulakh. CVSIZGPA, Tomsk, 1986. Tezisy dokladov. Part 1. Tomsk, 1986, 159-160. (RZRAB, 87/1Ye17).

126. Yermachenko, V.M.; Petrovskiy, V.N.; Protsenko, Ye.D.; et al. (). Frequency characteristics of a two-mode CO₂ laser. *Gazovyye lazery v metrologii*. MIFI. Moskva, Energoatomizdat, 1986, 58-66. (Tochnyye izmereniya i kvantovaya elektronika, no. 39, VNIIM, 1987, 385).
 127. Yur'yev, M.S. (). Light-stimulated heating of a medium in pulsed CO₂ lasers. *OPSPA*, vol. 62, no. 1, 1987, 136-139.
- c. Carbon Monoxide
128. Anan'yev, V.Yu.; Babayev, I.K.; Danilychev, V.A.; Ionin, A.A.; Lytkin, A.P.; Sazhina, N.N. (FIAN). Electroionization laser utilizing a mixture of carbon monoxide isotopes. *KVEKA*, no. 2, 1987, 386-389.
 129. Golovin, A.O.; Gurashvili, V.A.; Kochetov, I.V.; Kuz'min, V.N.; Napartovich, A.P.; Pal', A.F.; Pis'mennyy, V.D.; Pichugin, V.V.; Starostin, A.N.; Turkin, N.G. (). Limiting characteristics of non-self-sustained discharges in CO lasers. *TVYTA*, no. 5, 1986, 852-856. (RZFZA, 87/2L949).
 130. Zabolotnykh, A.V. (). Prospects for a photoionization discharge to obtain population inversion in mixtures which contain CO. *Inversnaya zaselennost' i generatsiya na perekhodakh v atomakh i molekulakh*. CVSIZGPA, Tomsk, 1986. Tezisy dokladov. Part 1. Tomsk, 1986, 122-123. (RZRAB, 87/1Ye30).
- d. Noble Gas
131. Babin, S.A.; Donin, V.I.; Shapiro, D.A. (). Lamb dip broadening in an argon laser plasma. *Inversnaya zaselennost' i generatsiya na perekhodakh v atomakh i molekulakh*. CVSIZGPA, Tomsk, 1986. Tezisy dokladov. Part 1. Tomsk, 1986, 112-113. (RZRAB, 87/1Ye46).
 132. Batyrbekov, G.A.; Batyrbekov, E.G.; Tleuzhanov, A.Ye.; Khasenov, M.U. (). Radioisotope preionization in gas-discharge lasers. *Inversnaya zaselennost' i generatsiya na perekhodakh v atomakh i molekulakh*. CVSIZGPA, Tomsk, 1986. Tezisy dokladov. Part 1. Tomsk, 1986, 154-155. (RZRAB, 87/2Ye57).
 133. Boyko, S.A.; Popov, A.I. (). Efficient longwave lasing at 5.4 μ m in pure neon. *Inversnaya zaselennost' i generatsiya na perekhodakh v atomakh i molekulakh*. CVSIZGPA, Tomsk, 1986. Tezisy dokladov. Part 1. Tomsk, 1986, 152-153. (RZRAB, 87/2Ye55).

134. Latush, Ye.L.; Sem, M.F.; Chebotarev, G.D. (). Lasing at the 2p(sub1)-1s(sub2) transition of Ne(I) at 585.3 nm under a discharge in a hollow cathode and in a longitudinal discharge. Inversnaya zaselennost' i generatsiya na perekhodakh v atomakh i molekulakh. CVSIZGPA, Tomsk, 1986. Tezisy dokladov. Part 1. Tomsk, 1986, 7-8. (RZRAB, 87/1Ye45).
 135. Skakun, V.S.; Tarasenko, V.F.; Fedenev, A.V. (). Penning plasma laser at the 3p-3s transition of neon pumped by a longitudinal e-beam. Inversnaya zaselennost' i generatsiya na perekhodakh v atomakh i molekulakh. CVSIZGPA, Tomsk, 1986. Tezisy dokladov. Part 1. Tomsk, 1986, 6. (RZRAB, 87/1Ye128).
 136. Tarasenko, V.F. (). Lasing in dense inert gases under e-beam pumping. Inversnaya zaselennost' i generatsiya na perekhodakh v atomakh i molekulakh. CVSIZGPA, Tomsk, 1986. Tezisy dokladov. Part 1. Tomsk, 1986, 5. (RZRAB, 87/2Ye56).
- e. Nitrogen
137. Gureyev, K.G.; Zolotarev, V.O. (). Kinetic study on vibrational relaxation in nitrogen. TVYTA, no. 1, 1987, 155-157.
 138. Il'yushko, V.G.; Kravchenko, V.F. (). Effect of the surface material of the discharge tube channel, on population inversion in a UV molecular nitrogen laser. Inversnaya zaselennost' i generatsiya na perekhodakh v atomakh i molekulakh. CVSIZGPA, Tomsk, 1986. Tezisy dokladov. Part 1. Tomsk, 1986, 179. (RZRAB, 87/1Ye29).
 139. Il'yushko, V.G.; Kravchenko, V.F.; Mikhalevskiy, V.S. (SKNTs). Effect of impurities on lasing in a UV nitrogen laser with a sectioned metal discharge tube. ISTVA, no. 2, 1986, 78-79. (RZFZA, 87/1L934).
 140. Kozlov, B.A. (). Periodic pulsed nitrogen laser at atmospheric pressure. Inversnaya zaselennost' i generatsiya na perekhodakh v atomakh i molekulakh. CVSIZGPA, Tomsk, 1986. Tezisy dokladov. Part 1. Tomsk, 1986, 183-184. (RZRAB, 87/1Ye28).
- f. Iodine
141. Abdullin, R.M.; Borisov, A.V.; Popov, A.I. (). Cataphoretic helium-iodine laser at transitions of the neutral iodine atom. Inversnaya zaselennost' i generatsiya na perekhodakh v atomakh i molekulakh. CVSIZGPA, Tomsk, 1986. Tezisy dokladov. Part 1. Tomsk, 1986, 150-151. (RZRAB, 87/1Ye64).

g. Hydrogen

142. Bruyev, A.S. (IOF). Spin-conversion hydrogen laser. PZTFD, no. 4, 1987, 211-213.
143. Gaygerov, B.A.; Pushkin, S.B.; Rusin, F.S. (). Hydrogen oscillator. OTIZD, no. 22, 1986, 1238184. (RZRAB, 87/1Ye47).

h. Ammonia

144. Baranov, V.Yu.; Dyad'kin, A.P.; Kazakov, S.A.; Razumov, A.S.; Starodubtsev, A.I. (IAE). Dual-frequency excitation of NH(sub3) under conditions of rapid rotational relaxation. KVEKA, no. 2, 1987, 415-417.

i. Carbon Tetrafluoride

j. Nitrous Oxide

k. Water Vapor

l. Heavy-Water Vapor

m. Submillimeter

n. Metal Vapor

145. Arlantsev, S.V.; Beketov, I.Ye.; Borovich, B.L.; Buchanov, V.V.; Zavorotnyy, S.I.; Molodykh, E.I.; Tykotskiy, V.V.; Yurchenko, N.I. (). Pumping of copper vapor lasers by induction fields occurring in e-beam injection. Inversnaya zaselennost' i generatsiya na perekhodakh v atomakh i molekulakh. CVSIZGPA, Tomsk, 1986. Tezisy dokladov. Part 1. Tomsk, 1986, 138. (RZRAB, 87/1Ye191).
146. Astadzhov, D.N.; Vuchkov, N.K.; Isayev, A.A.; Petrash, G.G.; Ponomarev, I.V.; Sabotinov, N.V. (FIAN). Relaxation of metastable copper atoms in a copper bromide vapor laser emitting regular pulses. KVEKA, no. 2, 1987, 396-399.
147. Astadzhov, D.N.; Vuchkov, N.K.; Isayev, A.A.; Petrash, G.G.; Ponomarev, I.V.; Sabotinov, N.V. (). Effect of hydrogen on the lasing characteristics of copper bromide vapor lasers. Inversnaya zaselennost' i generatsiya na perekhodakh v atomakh i molekulakh. CVSIZGPA, Tomsk, 1986. Tezisy dokladov. Part 1. Tomsk, 1986, 130. (RZRAB, 87/2Ye61).

148. Astadzhov, D.N.; Vuchkov, N.K.; Petrash, G.G.; Sabotinov, N.V. (FIAN). Study on the principles limiting the service life of copper bromide vapor lasers. Lazery na parakh metallov i ikh galogenidov. FIAN. Trudy, no. 181, 1987, 122-163.
149. Bakhramov, S.A.; Kokhkharov, A.M.; Tikhonenko, V.V.; Khabibullayev, P.K. (IYaFANUz). Resonance ionization of laser-excited rubidium vapor. Competition of multiphoton and collision ionization. DANKA, vol. 292, no. 2, 1987, 341-345.
150. Barankov, V.V.; Vas'kov, V.A.; Yermachenko, V.M. (). Single-mode lasing in cadmium and zinc vapor lasers. Gazovyye lazery v metrologii. MIFI. Moskva, Energoatomizdat, 1986, 44-49. (Tochnyye izmereniya i kvantovaya elektronika, no. 39, VNIIM, 1987, 366).
151. Glikin, L.S.; Gorbarenko, V.A.; Yepikhin, V.N.; Karpov, I.L. (). Intraresonator methods to control the radiation parameters in design systems with copper vapor laser amplifiers. Inversnaya zaselennost' i generatsiya na perekhodakh v atomakh i molekulakh. CVSIZGPA, Tomsk, 1986. Tezisy dokladov. Part 1. Tomsk, 1986, 135. (RZRAB, 87/1Ye51).
152. Gorbunova, T.M.; Yelayev, V.F.; Reutova, T.A.; Sukhanova, G.B.; Teodorovich, Z.S.; Fedorov, V.F. (). Radiation from a decaying plasma in a copper vapor laser and possibility for its diagnostics. Inversnaya zaselennost' i generatsiya na perekhodakh v atomakh i molekulakh. CVSIZGPA, Tomsk, 1986. Tezisy dokladov. Part 1. Tomsk, 1986, 194-195. (RZRAB, 87/1Ye50).
153. Isayev, A.A. (FIAN). Spectral composition of stimulated emission in pulsed copper vapor lasers. Lazery na parakh metallov i ikh galogenidov. FIAN. Trudy, no. 181, 1987, 35-53.
154. Isayev, A.A.; Lemmerman, G.Yu. (FIAN). Power supply system for pulsed metal vapor lasers. Lazery na parakh metallov i ikh galogenidov. FIAN. Trudy, no. 181, 1987, 164-179.
155. Isayev, A.A.; Lemmerman, G.Yu.; Markova, S.V.; Petrash, G.G. (FIAN). Pulsed barium vapor laser. Lazery na parakh metallov i ikh galogenidov. FIAN. Trudy, no. 181, 1987, 3-17.

156. Karabut, E.K.; Kravchenko, V.F.; Savranskiy, V.V. (). Theoretical and experimental study on models of IR barium vapor lasers. Inversnaya zaselennost' i generatsiya na perekhodakh v atomakh i molekulakh. CVSIZGPA, Tomsk, 1986. Tezisy dokladov. Part 1. Tomsk, 1986, 118-119. (RZRAB, 87/1Ye57).
157. Kazaryan, M.A.; Petrash, G.G.; Trofimov, A.N. (FIAN). Pulsed copper halide vapor lasers. Lazery na parakh metallov i ikh galogenidov. FIAN. Trudy, no. 181, 1987, 54-121.
158. Kel'man, V.A.; Klimovskiy, I.I.; Soleznova, L.A.; Fuchko, V.Yu. (). Mechanisms determining the population of metastable levels of Cu(I) in periodic pulsed copper vapor lasers. Inversnaya zaselennost' i generatsiya na perekhodakh v atomakh i molekulakh. CVSIZGPA, Tomsk, 1986. Tezisy dokladov. Part 1. Tomsk, 1986, 133-134. (RZRAB, 87/1Ye52).
159. Kirilov, A.V.; Polunin, Yu.O.; Soldatov, A.N. (). Two-beam lasing in Cu and Au vapors with radially spaced active media. Inversnaya zaselennost' i generatsiya na perekhodakh v atomakh i molekulakh. CVSIZGPA, Tomsk, 1986. Tezisy dokladov. Part 1. Tomsk, 1986, 128. (RZRAB, 87/1Ye53).
160. Klimkin, V.M.; Sokovikov, V.G.; Fedorishchev, V.N. (). Optically pumped mercury vapor laser. Inversnaya zaselennost' i generatsiya na perekhodakh v atomakh i molekulakh. CVSIZGPA, Tomsk, 1986. Tezisy dokladov. Part 1. Tomsk, 1986, 90-91. (RZRAB, 87/2Ye58).
161. Klimkin, V.M.; Sokovikov, V.G.; Fedorishchev, V.N. (). Cadmium vapor laser pumped by UV radiation. Inversnaya zaselennost' i generatsiya na perekhodakh v atomakh i molekulakh. CVSIZGPA, Tomsk, 1986. Tezisy dokladov. Part 1. Tomsk, 1986, 175-176. (RZRAB, 87/1Ye49).
162. Klimovskiy, I.I.; Morozov, A.V. (). Possibility of developing a laser-accumulator using a two-component mixture of metal vapors. Inversnaya zaselennost' i generatsiya na perekhodakh v atomakh i molekulakh. CVSIZGPA, Tomsk, 1986. Tezisy dokladov. Part 1. Tomsk, 1986, 139-140. (RZRAB, 87/1Ye54).
163. Markova, S.V.; Petrash, G.G.; Cherezov, V.M. (FIAN). Study on pulsed gold and bismuth vapor lasers. Lazery na parakh metallov i ikh galogenidov. FIAN. Trudy, no. 181, 1987, 18-34.

164. Mishakov, V.G.; Tkachenko, T.L. (). Formation kinetics of negative H ions in the active medium of sodium vapor lasers. Inversnaya zaselennost' i generatsiya na perekhodakh v atomakh i molekulakh. CVSIZGPA, Tomsk, 1986. Tezisy dokladov. Part 1. Tomsk, 1986, 136-137. (RZRAB, 87/2Ye60).
165. Shaparev, N.Ya.; Shkedov, I.M. (). Population inversion and lasing from optical discharge excitation of mercury vapor. Inversnaya zaselennost' i generatsiya na perekhodakh v atomakh i molekulakh. CVSIZGPA, Tomsk, 1986. Tezisy dokladov. Part 1. Tomsk, 1986, 92-93. (RZRAB, 87/2Ye59).
166. Solomonov, V.I. (). Decay of metastable metal atoms in a laser plasma at self-limiting transitions. Inversnaya zaselennost' i generatsiya na perekhodakh v atomakh i molekulakh. CVSIZGPA, Tomsk, 1986. Tezisy dokladov. Part 1. Tomsk, 1986, 129. (RZRAB, 87/2Ye12).
167. Vayner, V.V.; Ivanov, I.G.; Mikhalevskiy, V.S. (). Spectral characteristics of a hollow-cathode cadmium vapor laser. Inversnaya zaselennost' i generatsiya na perekhodakh v atomakh i molekulakh. CVSIZGPA, Tomsk, 1986. Tezisy dokladov. Part 1. Tomsk, 1986, 147. (RZRAB, 87/1Ye48).
168. Yevrushenko, G.S.; Lyakh, G.D.; Mal'tsev, A.N.; Polunin, Yu.P.; Reutova, T.A.; Fedorov, V.F. (). Metal vapor lasers with high pulse repetition rates. Inversnaya zaselennost' i generatsiya na perekhodakh v atomakh i molekulakh. CVSIZGPA, Tomsk, 1986. Tezisy dokladov. Part 1. Tomsk, 1986, 190-191. (RZRAB, 87/1Ye55).
- o. Gasdynamic
169. Bakanov, D.G.; Ivanova, O.Yu.; Kulikov, A.O.; Odintsov, A.I.; Fedoseyev, A.I. (). Spectrum of the long-wave lasing of a gasdynamic CO2 laser. ZPSBA, v. 46, no. 2, 1987, 218-222.
170. Baranov, A.N.; Volkov, A.Yu.; Demin, A.I.; Zotov, S.D.; Kudryavtsev, Ye.M.; Pykhov, R.L. (). Radiation spectrum of an electro-gasdynamic laser using coupled modes of the CO2 molecule excited by a transverse glow discharge in a direct current. Inversnaya zaselennost' i generatsiya na perekhodakh v atomakh i molekulakh. CVSIZGPA, Tomsk, 1986. Tezisy dokladov. Part 1. Tomsk, 1986, 168-169. (RZRAB, 87/1Ye124).

171. Fomin, N.A. (). Using shock tube technology for modeling of processes in gasdynamic mixing lasers. Fizicheskaya gazodinamika: eksperimental'noye modelirovaniye i diagnostika. ITMO. Minsk, 1985, 22-29. (Tochnyye izmereniya i kvantovaya elektronika, no. 39, VNIIM, 1987, 345).
172. Krauklis, A.V.; Samtsov, P.P. (). Ionization of supersonic flows in laser active media under nonequilibrium conditions. Fizicheskaya gazodinamika: eksperimental'noye modelirovaniye i diagnostika. ITMO. Minsk, 1985, 63-73. (Tochnyye izmereniya i kvantovaya elektronika, no. 39, VNIIM, 1987, 344).
173. Kryuchkov, S.I.; Kudryavtsev, N.N.; Novikov, S.S.; Shcheglov, V.N. (IKhF). Super-equilibrium pumping in CO₂ gasdynamic lasers from nitrous oxide decomposition. DANKA, v. 290, no. 1, 1986, 106-110.
174. Shmelev, V.M.; Margolin, A.D. (). Optical losses in CO gasdynamic lasers under resonant self-absorption of stimulated emission. FGVZA, no. 1, 1987, 110-114.
175. Soloukhin, R.I. (ITMO). Work on physical gasdynamics at the Institute of Heat and Mass Exchange, Academy of Sciences Belorussian SSR. Fizicheskaya gazodinamika: eksperimental'noye modelirovaniye i diagnostika. ITMO. Minsk, 1985, 3-13. (Tochnyye izmereniya i kvantovaya elektronika, no. 39, VNIIM, 1987, 35).
176. Soloukhin, R.I.; Sevast'yanenko, V.G. (). Determination of radiation fluxes in high-temperature gasdynamic systems. Fizicheskaya gazodinamika: eksperimental'noye modelirovaniye i diagnostika. ITMO. Minsk, 1985, 3-13. (Tochnyye izmereniya i kvantovaya elektronika, no. 39, VNIIM, 1987, 29).

4. Excimer

177. Adamovich, V.A.; Baranov, V.Yu.; Deryugin, A.A.; Kochetov, I.V.; Malyuta, D.D.; Napartovich, A.P.; Smakovskiy, Yu.B.; Strel'tsov, A.P. (IAE). Spectral characteristics of the XeCl* excimer in the 300-311 nm range. KVEKA, no. 1, 1987, 80-86.
178. Ageyev, V.P.; Atezhev, V.V.; Bukreyev, V.S.; Vartapetov, S.K.; Zhukov, A.I.; Konov, V.I.; Savel'yev, A.D. (IOF). Periodic pulsed excimer laser master-oscillator/regenerative-amplifier system. PZTFD, no. 1, 1987, 19-22.

179. Danilychev, V.A.; Dolgikh, V.A.; Kerimov, O.M.; Lobanov, A.N.; Samarin, A.Yu.; Tamanyan, G.Yu. (FIAN). Vibrational relaxation of the B state of a XeF* molecule. KVEKA, no. 2, 1987, 399-401.
180. Didenko, A.N.; Petrov, V.M.; Slinko, V.N.; Sulakshin, S.S.; Yushkov, Yu.G. (ToPI). Supercooled plasma in a high-power pulsed microwave discharge. DANKA, vol. 292, no. 3, 1987, 601-604.
181. Gorban', I.S.; Zubrilin, N.G.; Uvarova, N.V.; Chernomorets, M.P.; Shevchenko, V.A.; Yurchuk, S.V. (). XeF laser spectrum at 350 nm. ZPSBA, v. 46, no. 1, 1987, 130-132.
182. Platonenko, V.T.; Taranukhin, V.D. (MGU). Amplification of ultraviolet picosecond pulses in an XeCl amplifier. KVEKA, no. 1, 1987, 62-66.
183. Verkhovskiy, V.S.; Mikhaylov, A.A.; Tikhomirov, S.I. (). Periodic pulsed excimer laser. Inversnaya zaselenost' i generatsiya na perekhodakh v atomakh i molekulakh. CVSIZGPA, Tomsk, 1986. Tezisy dokladov. Part 1. Tomsk, 1986, 185. (RZRAB, 87/1Ye31).

5. Dye Vapor

184. Bolot'ko, L.M.; Sukhodola, A.A. (). Light quenching of triplet POPOP states in a gas phase. ZPSBA, v. 46, no. 1, 1987, 90-95.
185. Gruzinskiy, V.V.; Degtyarenko, K.M.; Kopylova, T.N.; Kuznetsov, A.L.; Novikov, A.N.; Sarycheva, T.A. (). Spectral-luminescent and lasing properties of new active media in the blue spectrum range. ZPSBA, v. 46, no. 1, 1987, 52-56.

D. CHEMICAL LASERS

1. Miscellaneous

186. Bashkin, A.S.; Gamzatov, N.M.; Orayevskiy, A.N. (FIAN). Numerical study on a purely chemical gas generator of atomic hydrogen (deuterium) and of a c-w H(D)-O(sub3)-CO(sub2) laser based on it. KVEKA, no. 2, 1987, 244-252.
187. Basov, N.G.; Gavrikov, V.F.; Pozdneyev, S.A.; Shcheglov, V.A. (FIAN). Chemical lasers using electron transitions. Part 2. New lasers with a chain reaction excitation mechanism. FIAN. Preprint, no. 304, 1986, 62 p. (RZFZA, 87/2L961).

188. Bel'dyugin, I.M.; Vysotskiy, Yu.P.; Stepanov, A.A.; Shcheglov, V.A. (FIAN). Electroionization chemical hydrogen-iodine laser. KVEKA, no. 2, 1987, 356-363.
189. Mankelevich, Yu.A.; Rakhimov, A.T.; Suetin, N.V.; Feoktistov, V.A.; Filippov, S.S. (NIIYaF). Numerical investigation of a H_2-Cl_2 chemical laser with a chain reaction mechanism. KVEKA, no. 2, 1987, 253-259.
190. Pozdneyev, S.A.; Shcheglov, V.A. (FIAN). Use of quantum theory of scattering for the calculation of the simplest chemical reactions. Electron scattering by diatomic molecules. KHFID, no. 1, 1987, 21-26.
191. Pozdneyev, S.A.; Shcheglov, V.A. (FIAN). Use of quantum theory of scattering in a three-body system for the calculation of the simplest chemical reactions. Reactions involving three atoms. KHFID, no. 2, 1987, 147-152.

2. Fluorine + Hydrogen (Deuterium)

192. Baykov, E.U.; Bashkin, A.S.; Orayevskiy, A.N. (FIAN). Chemical lasers utilizing the chain reaction of hydrogen fluorination with a thermal branching mechanism. KVEKA, no. 1, 1987, 151-157.
193. Baykov, E.U.; Bashkin, A.S.; Orayevskiy, A.N. (FIAN). Possibility of developing c-w chemical HF lasers based on a chain reaction with a thermal branching mechanism. FIAN. Preprint, no. 264, 1986, 30 p. (RZFZA, 87/2L962).

3. Photodissociation

194. Basov, N.G.; Volkov, V.N.; Gavrilina, L.K.; Leonov, Yu.S.; Sautkin, V.A. (FIAN). Formation of carbon in photodissociation iodine lasers. KVEKA, no. 2, 1987, 300-305.

4. Transfer

5. Oxygen + Iodine

6. Carbon Disulfide + Oxygen

7. Sulfur Hexafluoride + Hydrogen

E. COMPONENTS

1. Miscellaneous

195. Morozov, I.A.; Smirnova, E.A.; Yurkevich, I.I.; Budnik, L.I. (IFANB). Laser optical elements. Catalog. IFANB. Preprint, no. 440, 1986, 46 p. (RZFZA, 87/2L639).

2. Resonators

a. Design and Performance

196. Anan'yev, Yu.A.; Anikichev, S.G. (). Series expansion by eigenfunctions of open resonator equations. OPSPA, v. 61, no. 4, 1986, 856-860.
197. Biryukov, A.S.; Kudryavtsev, Ye.M.; Logunov, A.N. (FIAN). Radiation field in a system of two confocal telescopic resonators. FIAN. Preprint, no. 235, 1986, 24 p. (RZFZA, 87/1L1054).
198. Gonchukov, S.A.; Yemets, Ye.P. (). Effect of amplitude anisotropy on the mode spectra of phase anisotropic optical resonators. Gazovyye lazery v metrologii. MIFI. Moskva, Energoatomizdat, 1986, 18-24. (Tochnyye izmereniya i kvantovaya elektronika, no. 39, VNIIM, 1987, 585).
199. Kolesnikov, P.M.; Borisevich, L.Ye. (). Calculating the eigenmodes of resonators with central apertures. Fizicheskaya gazodinamika: eksperimental'noye modelirovaniye i diagnostika. ITMO. Minsk, 1985, 148-155. (Tochnyye izmereniya i kvantovaya elektronika, no. 39, VNIIM, 1987, 597).
200. Kukushkin, V.G. (GrodGU). Misaligned laser cavity with inhomogeneous optical elements. KVEKA, no. 2, 1987, 381-383.
201. Svirina, L.P. (IFANB). Nonlinear interaction of opposed waves in ring lasers with anisotropic resonators. IFANB. Dissertation, 1986, 19 p. (Tochnyye izmereniya i kvantovaya elektronika, no. 39, VNIIM, 1987, 516).

b. Mode Kinetics

- 202. Bakayev, D.S.; Vdovin, Yu.A. (MIFI). Competition of modes emitted at adjacent transitions. KVEKA, no. 1, 1987, 100-105.
- 203. Kravtsov, N.V.; Naniy, O.Ye.; Shelayev, A.N. (NIIYaF). Spatial separation of opposed waves in a ring laser. KVEKA, no. 2, 1987, 404-406.
- 204. Lyashko, O.M.; Kutsak, A.A. (). Calculation of the frequency characteristics of a ring laser with modulated frequency reciprocity. ZPSBA, v. 46, no. 1, 1987, 47-52.
- 205. Makarov, V.A.; Matveyeva, A.V. (MGU). Polarizational multistability in a ring resonator with a nonlinear optically active medium. KVEKA, no. 1, 1987, 87-93.

3. Pump Sources

- 206. Dashuk, P.N.; Kulakov, S.L.; Kuchinskiy, A.A.; Rybin, Yu.V.; Smironov, V.A. (LPI). Use of soft X-ray radiation of a nanosecond sliding discharge in preionized systems. ZTEFA, no. 1, 1987, 50-57.
- 207. Denishchik, Yu.S. (). Effect of the operating conditions of pumping on energy conversion efficiency in an active medium with regard to luminescence amplification. VINITI. Deposit, no. 6523-V86. (ZPSBA, v. 46, no. 1, 1987, 164).
- 208. Didenko, A.N.; Petrov, V.M.; Slinko, V.N.; Sulakshin, S.S.; Sulakshin, A.S. (). Using high-power microwave oscillators for microwave excitation of high-pressure gas lasers. Inversnaya zaselenost' i generatsiya na perekhodakh v atomakh i molekulakh. CVSIZGPA, Tomsk, 1986. Tezisy dokladov. Part 1. Tomsk, 1986, 95-96. (RZRAB, 87/2Ye201).
- 209. Dul'nev, G.N.; Barantsev, V.V.; Mikhaylov, A.Ye.; Nagibin, Yu.T.; Ovchinnikov, V.M.; Parfenov, V.G. (LITMO). Thermal conditions of pumping systems of solid-state lasers. ZTEFA, no. 1, 1987, 98-102.
- 210. Kravchenko, V.F.; Prokhorov, A.M.; Savranskiy, V.V.; Shelepo, A.P. (). Using microwave discharges to pump pulsed gas lasers at self-limiting transitions. Inversnaya zaselenost' i generatsiya na perekhodakh v atomakh i molekulakh. CVSIZGPA, Tomsk, 1986. Tezisy dokladov. Part 1. Tomsk, 1986, 94. (RZRAB, 87/2Ye205).

4. Cooling Systems

- 211. Lembke, E. (). Method to remove heat from a laser. Patent GDR, no. 238885, 3 Sep 1986. (RZRAB, 87/2Ye218).
- 212. Manov, S.V.; Orekhova, V.I.; Sinel'nikov, S.P.; Timoshenko, N.I.; Yamnov, A.L.; Yartsev, A.I. (MEI). Optical and thermophysical properties of calcium chloride and lithium chloride aqueous solutions [as heat transfer media for lasers]. MEI. Nauchnyye trudy, no. 72, 1985, 134-139. (RZFZA, 87/11185).
- 213. Provorova, O.G. (KrGU). Designing an air cooling system for gas-discharge lasers. VINITI. Deposit, no. 7333-V, 21 Oct 1986, 8 p. (RZFZA, 87/1L946).

5. Deflectors

6. Attenuators

7. Collimators

8. Diffraction Gratings

- 214. Chashchin, S.P.; Murzakhanov, A.Z. (GOI). Spatial-angle characteristics of reflection from a grating with curvilinear grooves. OPMFA, no. 1, 1987, 56-57.
- 215. Kostyshin, M.T.; Romanenko, P.F.; Kolomiyets, T.M.; Severin, V.S.; Stronskiy, A.V. (). Effect of additional irradiation on the diffraction efficiency of gratings recorded in $\text{As}(\text{sub}2)\text{Se}(\text{sub}3)\text{-As}(\text{sub}2)\text{S}(\text{sub}2)\text{-Ag}$ systems. FOOSD, no. 17, 1986, 90-95. (RZFZA, 87/2L726).
- 216. Kukhtarev, N.V.; Dovgalenko, G.Ye. (). Self-diffractive electrogyration and eletroellipticity in centrosymmetric crystals. FOOSD, no. 17, 1986, 112-116. (RZFZA, 87/2L729).
- 217. Vasnetsov, M.V. (). Diffraction characteristics of reflectional volume phase gratings. FOOSD, no. 17, 1986, 125-129. (RZFZA, 87/2L720).

9. Focusers

- 218. Schlichting, J.; Halwass, K. (). Automatic focuser. Patent GDR, no. 234340, 2 Apr 1986. (RZMIB, 87/1.32.1115).

10. Windows

219. Artyushenko, V.G.; Blistanov, A.A.; Kugayenko, O.M.; Lapiner, Kh.Z.; Ul'yanov, V.A. (MISIS). Formation of color centers in radiation output windows of electroionization CO₂ lasers. VINITI. Deposit, no. 7124-V, 11 Oct 1986, 13 p. (RZFZA, 87/1L688).

11. Polarizers

220. Barta, C.; Trnka, J. (). Monolithic polarizing prism consisting of univalent mercury halide single crystal. Author's certificate Czechoslovakia, no. 226135, 15 Apr 1986. (RZMIB, 87/1.32.1142).

12. Beam Shapers

221. Davydov, Yu.T.; Dubitskiy, V.Ye.; Mikhin, S.P. (). Reference radiation shaper for a multifrequency laser correlator. Effectivnyye metody obrabotki signalov v radiotekhnicheskikh sistemakh. Moskva, 1986, 78-80. (RZRAB, 87/2Ye473).

13. Lenses

14. Filters

222. Grigor'yeva, Ye.V.; Samson, A.M. (). Effect of time relaxation on the lasing dynamics of a laser with a saturable filter. ZPSBA, v. 46, no. 2, 1987, 200-207.
223. Mikhaylov, I.A.; Vanin, V.A.; Vorob'yev, S.P. (). Study on the selective characteristics of bichromated gelatin reflectional holographic filters. Fotometriya i yeye metrologicheskoye obespecheniye. CVNTKFMO, 6th, 27-31 Oct 1986. Tezisy dokladov. Moskva, 1986, 259. (RZRAB, 87/2Ye499).
224. Suslikov, L.M.; Gad'mashi, Z.P.; Slivka, V.Yu. (GOI). Angular aperture of multistep optical filters using gyrotropic crystals with an "isotropic" point. OPMPA, no. 9, 1986, 60-61.

15. Beam Splitters

225. Butkevich, V.I.; Demkin, V.N.; Privalov, V.Ye. (). Investigation of reflective-index fluctuations for a beam splitter in a laser-emission power stabilization system. OPSPA, vol. 62, no. 1, 1987, 140-148.

226. Itskovich, O.Yu.; Kondratenko, P.S.; Finkel'berg, V.M. (). Thermal distortion of the wavefront of laser beams in actual beam splitters. Fotometriya i yeye metrologicheskoye obespecheniye. CVNTKFMО, 6th, 27-31 Oct 1986. Tezisy dokladov. Moskva, 1986, 27. (RZRAB, 87/2Ye212).

16. Mirrors

227. Akhsakhalyan, A.D.; Gaponov, S.V.; Gusev, S.A.; Platonov, Yu.Ya.; Salashchenko, N.N.; Polushkin, N.I. (IPF). Multilayer x-ray mirrors in the 25-44 angstrom range. PZTFD, no. 17, 1986, 1081-1086.
228. Gaponov, S.V.; Dubrov, V.V.; Zabrodin, I.G.; Kuz'michev, A.I.; Luskin, B.M.; Salashchenko, N.N. (). Multilayer mirrors of normal incidence in the 125-200 angstrom wavelength band. PZTFD, no. 4, 1987, 214-218.
229. Gonchukov, S.A.; Usov, P.A. (). Matching of a mirror to a hollow dielectric waveguide at higher oscillation modes. Gazovyye lazery v metrologii. MIFI. Moskva, Energoatomizdat, 1986, 28-32. (Tochnyye izmereniya i kvantovaya elektronika, no. 39, VNIIM, 1987, 599).
230. Vlasov, N.G.; Yanovskiy, A.V. (). Control of large-diameter mirrors. Fotometriya i yeye metrologicheskoye obespecheniye. CVNTKFMО, 6th, 27-31 Oct 1986. Tezisy dokladov. Moskva, 1986, 268. (RZRAB, 87/2Ye? 5).
231. Voigt, P.; Dammann, E.; Haehnel, O.; Moehrer, K.; Merker, W. (). Method to measure reflecting power [of mirrors]. Patent GDR, no. 235495, 7 May 1986. (RZMIB, 87/1.32.1063).
232. Walther, H.G.; Welsch, E. (). Exact measurement of the reflecting power of 100-percent mirrors by a photoacoustic device. Beitrage zur Optik und Quantenelektronik. Band 11, Dresden, 1986, 150-151. (RZMIB, 87/2.32.1241).
233. Yefimov, V.M.; Sobol', V.P. (). Prism systems to measure the absolute coefficient of mirror reflection. Fotometriya i yeye metrologicheskoye obespecheniye. CVNTKFMО, 6th, 27-31 Oct 1986. Tezisy dokladov. Moskva, 1986, 108. (RZRAB, 87/2Ye282).

17. Detectors

234. Balkashin, O.P.; Yanson, I.K.; Krasnogorov, A.Yu.; Solov'yev, V.S. (). Heterodyne detector of laser radiation. Fotometriya i yeye metrologicheskoye obespecheniye. CVNTKFM0, 6th, 27-31 Oct 1986. Tezisy dokladov. Moskva, 1986, 29. (RZRAB, 87/2Ye491).
235. Berezhnoy, A.Ye.; Golub, Ya.S.; Stysin, V.Ye.; Tikhomirov, S.V.; Ustinnikov, V.N. (). Calibration of an optical measuring oscillator to control the threshold of wear of pulsed photodetectors. Fotometriya i yeye metrol ogicheskoye obespecheniye. CVNTKFM0, 6th, 27-31 Oct 1986. Tezisy dokladov. Moskva, 1986, 25. (RZRAB, 87/2Ye272).
236. Chulyukov, V.A. (). Effect of the entrance aperture on the accuracy of velocity measurement in homodyne detection of optical radiation. IVUZB, no. 9, 1986, 50-52. (RZFZA, 87/2Zh78).
237. Gergel', Ye.N.; Divin, V.D.; Yelizarov, A.S.; Kulyupin, Yu.A.; Lysenko, V.S. (IFANUK). Low-inertia pyroelectric detection device. PRTEA, no. 1, 1987, 178-180.
238. Kaufman, S.A.; Kuznetsov, A.A.; Medik, V.S.; Chereugin, V.L. (). The UIS-2 device to measure electric signals in bolometric laser radiation detectors. Fotometriya i yeye metrologicheskoye obespecheniye. CVNTKFM0, 6th, 27-31 Oct 1986. Tezisy dokladov. Moskva, 1986, 46. (RZRAB, 87/2Ye274).
239. Mazmanishvili, A.S. (). Noise immunity quantum counter as a time interval meter. AVMEB, no. 1, 1987, 19-22.
240. Osadchuk, V.S.; Revenok, V.I.; Sukhobrus, I.I.; Sergiyenko, A.F. (ViPI). Photon counter. OTIZD, no. 25, 1986, 1242723. (RZFZA, 87/1L661).
241. Rud', Yu.V. (). Photopleochroism and physical principles in the development of semiconductor polarimetric photodetectors. IVUFA, no. 8, 1986, 68-83. (RZFZA, 87/2L313).
242. Voznitskiy, M.V.; Khaytun, F.I. (GOI). Optimizing the detection of pulsed signals in systems with avalanche photodiodes. OPMPA, no. 9, 1986, 6-7.

243. Voznitskiy, M.V.; Yermakov, B.A.; Rasskazov, S.A.; Khaytun, F.I. (). Efficiency of shortening the duration of a transmitted pulsed signal in systems with avalanche photodiodes. RATEA, no. 11, 1986, 80-82. (RZFZA, 87/2Zh66).
244. Zagorskiy, Ya.T.; Kuznetsov, A.A.; Chereugin, V.L.; Kabanov, G.L. (). The FIEK-3 electric calibration pulse shaper [for laser radiation detectors]. Fotometriya i yeye metrologicheskoye obespecheniye. CVNTKFM0, 6th, 27-31 Oct 1986. Tezisy dokladov. Moskva, 1986, 47. (RZMIB, 87/1.32.1047).

18. Modulators

245. Komarov, V.A.; Revyakina, L.V.; Kozlov, V.V. (). Photothermoplastic gas-filled space-time modulator of light. Fotometriya i yeye metrologicheskoye obespecheniye. CVNTKFM0, 6th, 27-31 Oct 1986. Tezisy dokladov. Moskva, 1986, 275. (RZRAB, 87/2Ye459).
246. Kwiek, P.; Sliwinski, A. (). Method and device for phase modulation of light by ultrasound. Patent Poland, no. 134655, 30 May 1986. (RZRAB, 87/2Ye477).
247. Piliposyan, R.B. (). Automated design of electrooptic modulators in integrated circuits. PAKBA, no. 7, 1986, 40-42. (RZRAB, 87/2Ye455).
248. Rasch, A.; Karthe, W.; Rottschalk, M.; Leine, L. (). Optimization of parallel band couplers based on Ti:LiNbO_3 for an integrated optical Mach-Zehnder modulator. Beitrage zur Optik und Quantenelektronik. Band 11. Dresden, 1986, 96-98. (RZRAB, 87/2Ye478).

F. NONLINEAR OPTICS

1. General Theory

249. Agap'yev, B.D.; Gornyy, M.B.; Matisov, B.G. (LPI). Spatial selection of quantum states of atomic systems. PZTFD, no. 18, 1986, 1141-1145.
250. Akhmanov, S.A. (book reviewer). (). Review of book: Optical Bistability: Controlling Light with Light, by H. Gibbs. New York, Academic Press, 1985, 471 p. UFNAA, vol. 151, no. 1, 1987, 185-188.
251. Alekseyev, K.N.; Berman, G.P. (IFSOAN). Dynamic chaos under the action of external monochromatic radiation on two-level media, allowing for cooperative effects. IFSOAN. Preprint, no. 399F, 1986, 32 p. (RZFZA, 87/2L824).

252. Amus'ya, M.Ya.; Baltenkov, A.S. (FTI). Acceleration of atoms under retarded absorption of light. PZTFD, no. 18, 1986, 1123-1125.
253. Arakelyan, S.M.; Arushanyan, L.Ye.; Chilingaryan, Yu.S. (). Light scattering under magnetic-field-induced threshold reorientation in nematic liquid crystals. IAAFA, no. 4, 1986, 224-227. (RZFZA, 87/1L261).
254. Arakelyan, S.M.; Grigoryan, G.L.; Kocharyan, L.M.; Nersisyan, S.Ts.; Chilingaryan, Yu.S. (YeGU). Measuring third-order optical nonlinearity in nematic liquid crystals from excitation of surface electromagnetic waves. IANFA, no. 2, 1987, 234-237.
255. Babonas, G.A.; Martsinkyavichyus, S.A.; Shileyka, A.Yu. (). Birefringence and gyrotropy in II-IV-V(sub2) compounds. IVUFA, no. 8, 1986, 41-53. (RZFZA, 87/2L314).
256. Bachin, I.V.; Krasovitskiy, D.V. (RGU). Electromagnetic solitons in a paramagnetic medium. IVYRA, no. 1, 1987, 117-119.
257. Balkarey, Yu.I.; Grigor'yants, A.V.; Rzhanov, Yu.A. (). Self-oscillations, transverse diffusion instability, and spatial dissipative structures under optical bistability and multistability. KVEKA, no. 1, 1987, 128-134.
258. Brazovskaya, N.V. (API). Modeling the spectra of pulsed radiation. VINITI. Deposit, no. 7320-V, 21 Oct 1986, 14 p. (RZFZA, 87/1L1188).
259. Brazovskaya, N.V. (API). Simulation model of the interaction between pulsed radiation and matter. VINITI. Deposit, no. 7319-V, 21 Oct 1986, 35 p. (RZFZA, 87/1L1189).
260. Bulyshev, A.Ye.; Denisov, V.I.; Preobrazhenskiy, N.G.; Suvorov, A.Ye. (). Statistical modeling of selective reflection of light from resonant absorbing media under bleaching conditions. OPSPA, v. 61, no. 4, 1986, 871-874.
261. Carbunescu, E. (). Effect of the coherence of radiation on nonlinear optical phenomena (in Romanian). SCEFA, no. 6, 1986, 517-525. (RZFZA, 87/2L837).

262. Davydov, B.L.; Kotovshchikov, S.G.; Yakovlev, Yu.O. (). Compensation of temperature changes of phase matching angles in nonlinear crystals. ZPSBA, v. 46, no. 1, 1987, 150-153.
263. Derbov, V.L.; Mel'nikov, L.A.; Novikov, A.D. (). Induced lens and diaphragm effects on the narrow resonance contour of saturable absorption of Gaussian beams. OPSPA, v. 61, no. 3, 1986, 648-650.
264. Dianov, Ye.M.; Karasik, A.Ya.; Luchnikov, A.V.; Mamyshev, P.V.; Prokhorov, A.M. (IOF). Nonlinear effects in single-mode lightguides under nano- and picosecond laser pumping. Volokonnaya optika. IOF. Trudy, no. 5, 1987, 93-114.
265. Dykman, M.I.; Tarasov, G.G. (IPANUK). Dichroic optical bistability in a nonlinear Fabry-Perot interferometer. KVEKA, no. 2, 1987, 260-264.
266. Fomin, V.M.; Pokatilov, Ye.P. (). Optical properties of multilayer structures. Part 1. Polaritons (in English). PSSBB, v. B136, no. 1, 1986, 187-199. (RZFZA, 87/1L406).
267. Golovchenko, Ye.A.; Dianov, Ye.M.; Pilipetskiy, A.N.; Prokhorov, A.M.; Serkin, V.N. (IOF). Self-acting and limiting compression of femtosecond optical wave packets in a nonlinear dispersive medium. ZFPRA, vol. 45, no. 2, 1987, 73-76.
268. Gorshkov, V.G.; Danileyko, Yu.K.; Lebedeva, T.P.; Nesterov, D.A. (IOF). Transition from harmonic behavior to chaos during interference of planar waves in a nonlinear medium. ZFPRA, vol. 45, no. 4, 1987, 196-199.
269. Grigonis, R.A.; Drabovich, K.N.; Iskanderov, N.A.; Sinyavskiy, N.M. (). Effect of suppression of intensity fluctuations in a superadiant field under multiphoton stochastic excitation of quantum transitions. IANFA, no. 2, 1987, 243-247.
270. Gusev, V.V.; Dmitriyeva, Ye.I.; Zotov, V.I.; Medvedev, B.A. (). Amplification of radiation using a dual-frequency in a donor-acceptor pair due to asymmetry in the imaginary part of the nonlinear susceptibility of an acceptor. OPSPA, vol. 62, no. 2, 1987, 457-460.

271. Khadzhi, P.I.; Moskalenko, S.A.; Shibarshina, G.D.; Rotaru, A.Kh. (). Domain formation and nonlinear bleaching of crystals in the exciton region of the spectrum. FTVTA, no. 6, 1986, 1883-1885. (RZFZA, 87/1L1101).
272. Khizhnyakov, V. (). Delayed and leading echo. ETFMB, no. 3, 1986, 332-335. (RZFZA, 87/1L1185).
273. Khizhnyakov, V.V. (). Delay and advance of stimulated echo by resonance radiation. FTVTA, no. 7, 1986, 2221-2223. (RZFZA, 87/2L1126).
274. Kizevetter, D.V.; Malyugin, V.I. (GOI). Indicatrices of the scattering of light by a rough surface of glass. OPMPA, no. 2, 1987, 13-15.
275. Kononov, M.V. (KGU). Nonlinear interaction between traveling electromagnetic waves in waveguides and ferroelectrics. KGU. Dissertation, 1986, 16 p. (Tochnyye izmereniya i kvantovaya elektronika, no. 39, VNIIM, 1987, 250).
276. Kuz'min, V.S.; Yashin, A.N. (). Transient phenomena in condensed media under multiphoton resonance conditions. DBLRA, no. 10, 1986, 909-912. (RZFZA, 87/2L829).
277. Martsinkyavichyus, S.; Babonas, G.; Shileyka, A. (). Dispersion of the refractive index and birefringence in CdSnP(sub2) and ZnSiP(sub2) crystals. LFSBA, no. 6, 1986, 732-739. (RZFZA, 87/2L312).
278. Melik-Barkhudarov, T.K. (). Quantum theory of light scattering by atoms. IAAFA, no. 4, 1986, 171-175. (RZFZA, 87/2L104).
279. Muradyan, A.Zh.; Petrosyan, L.S. (). Induced change in the polarization of a coherent ultrashort light pulse in a resonance medium. IAAFA, no. 4, 1986, 191-195. (RZFZA, 87/1L1190).
280. Murina, T.A.; Rozanov, N.N. (). Kinetic regimes of an optical bistable device based on nonlinear scattering. OPSPA, vol. 62, no. 2, 1987, 477-479.
281. Naboykin, Yu.V.; Andrianov, S.N.; Zinov'yev, P.V.; Malyukin, Yu.V.; Rudenko, Ye.N.; Samartsev, V.V.; Silayeva, N.B.; Sheybut, Yu.Ye. (). Optical superradiance in pyrene-doped biphenyl crystals and the effect of phonons on its formation (in English). PSSBB, v. B135, no. 2, 1986, 503-512. (RZFZA, 87/2L1129).

282. Papanyan, V.O.; Ritus, V.I. (FIAN). Three-photon interaction in an intense field. FIAN. Trudy, no. 168, 1986, 120-140.
283. Ryvkin, B.S. (FTI). Discontinuity of photovoltage in a circuit, including several photodiodes under a smooth change in luminous power. PZTFD, no. 18, 1985, 1118-1121.
284. Saburova, R.V. (). Light echo in a system of particles with a constant dipole moment. UFIZA, no. 9, 1986, 1406-1410. (RZFZA, 87/1L863).
285. Silayeva, N.B.; Zinov'yev, P.V.; Malyukin, Yu.V.; Rudenko, Ye.N.; Andrianov, S.N.; Sheybut, Yu.Ye. (). Optical superradiance in crystals. IANFA, no. 8, 1986, 1500-1506. (RZFZA, 87/1L860).
286. Velikovich, A.L.; Golubev, G.P.; Kaufman, I.Kh.; Luchinskiy, D.G. (VNIIMS). Optical bistability and multistability in a three-mirror system of combined resonators. PZTFD, no. 3, 1987, 161-166.
287. Vlasov, R.A.; Grib, A.F.; Zuykov, V.A.; Zyul'kov, V.A.; Khadyev, I.Kh. (). Shaping of light beams and pulses by scanning. IANFA, no. 8, 1986, 1559-1564. (RZFZA, 87/2L1127).
288. Wendler, L. (). S-polarized nonlinear surface polaritons. Effects of a transition layer (in English). PSSBB, v. B135, no. 2, 1986, 759-774. (RZFZA, 87/1L407).
289. Yemel'yanov, V.I.; Seminogov, V.N.; Sokolov, V.I. (). Light diffraction on a surface with a large amplitude of relief modulation and surface nonlinear optical effects. KVEKA, no. 1, 1987, 33-46.
290. Yevseyev, I.V.; Reshetov, V.A. (MIFI). Information storage time by means of stimulated photon echo. ZFPRA, v. 44, no. 4, 1986, 160-162.
291. Yevseyev, I.V.; Yermachenko, V.M. (). Photon echo and its variations in atoms with a nuclear spin other than zero. IANFA, no. 8, 1986, 1545-1550. (RZFZA, 87/1L852).
292. Zakharov, S.M.; Manykin, E.A. (). Time and correlation characteristics of echo signals in two- and three-level systems under conditions of inhomogeneous broadening or resonance energy levels. ZETFA, v. 91, no. 4, 1986, 1289-1301.

293. Zel'dovich, B.Ya.; Nemkova, Ye.A. (FIAN). Effect of phase self-modulation on the interaction of opposed waves. KRSFA, no. 1, 1987, 21-23.
294. Zheleznyakov, V.V.; Kocharovskiy, V.V.; Kocharovskiy, Vl.V. (IPF). Cyclotron superradiance as a classical analog of Dicke superradiance. IVYRA, no. 9, 1986, 1095-1116.

2. Frequency Conversion

295. Akmanov, A.G.; Val'shin, A.M.; Telegin, L.S.; Shakirov, B.G. (BashGU). Measuring the duration of ultrashort pulses by nonsynchronous noncollinear harmonic generation. IANFA, no. 2, 1987, 261-263.
296. Aktsipetrov, O.A.; Baranova, I.M.; Mishina, Ye.D.; Petukhov, A.V. (MGU). Second harmonic generation on the surface of center-symmetrical metals and semiconductors and the absorption of organic molecules. PZTFD, no. 3, 1987, 156-161.
297. Aktsipetrov, O.A.; Dubinina, Ye.M.; Yelovikov, S.S.; Yesikov, D.A.; Mishina, Ye.D.; Mominykh, N.N. (MGU; MIREA). Giant second harmonic in "cooled" films and the mechanism of surface amplification. ZFPRA, v. 44, no. 8, 1986, 371-374.
298. Avetisyan, Yu.O.; Bagdasaryan, D.A. (). Lasing at the difference frequency of lasers in a rectangular waveguide partially filled with nonlinear crystal. IAAFA, no. 4, 1986, 196-199. (RZFZA, 87/1L1158).

3. Parametric Processes

299. Agranat, M.B.; Itskovich, O.Yu.; Kondratenko, P.S. (). Parametric frequency conversion by ultrashort light pulses and its use in the metrology of fast-flow processes. Fotometriya i yeye metrologicheskoye obespecheniye. CVNTRFMO, 6th, 27-31 Oct 1986. Tezisy dokladov. Moskva, 1986, 50. (RZMIB, 87/2.32.1213).
300. Azimov, B.S.; Sukhorukov, A.P.; Trukhov, D.V. (MGU). Parametric multifrequency solitons: origin, collisions and decay. IANFA, no. 2, 1987, 229-233.
301. Zabolotskiy, A.A. (IAESON). Resonance and parametric interaction between short light pulses in a multi-level nonlinear medium. ZETFA, vol. 92, no. 1, 1987, 46-55.

4. Stimulated Scattering

a. Miscellaneous Scattering

- 302. Antipov, O.L.; Khazanov, I.V. (IPF). Self-simulation solutions of the nonlinear problem of nonstationary associated stimulated scattering of light. IVYRA, no. 1, 1987, 49-55.
- 303. Dianov, Ye.M.; Pilipetskiy, A.N.; Prokhorov, A.M.; Serkin, V.N. (IOF). Ultrashort pulses in stimulated-scattering lightguide lasers. Volokonnaya optika. IOF. Trudy, no. 5, 1987, 145-154.
- 304. Grechushkin, K.V.; Pivovarov, A.V. (NIIMF). Effect of laser radiation on the low-frequency spectra of the stimulated scattering of light. ZFPRA, vol. 45, no. 1, 1987, 8-9.
- 305. Zubkova, L.Ye.; Mokhnatyuk, A.A.; Polivanov, Yu.N.; Prokhorov, K.A.; Sayakhov, R.Sh. (IOF). Hyperstimulated scattering of light using hot phonon polaritons. ZFPRA, vol. 45, no. 1, 1987, 47-49.

b. Raman

- 306. Belousov, V.N.; Bol'shov, L.A.; Yelkin, N.N.; Koval'skiy, N.G.; Niziyenko, Yu.K.; Persiantsev, M.I. (IAE). Mechanisms of nonlinear distortions in an angular radiation spectrum under stimulated scattering. ZETFA, vol. 92, no. 2, 1987, 61-73.
- 307. Butkovskiy, O.Ya.; Zabolotskaya, Ye.A.; Kravtsov, Yu.A.; Ryabykin, V.V. (IOF). Experimental observation of stimulated Raman sound scattering by gas bubbles in water. AKZHA, no. 1, 1987, 163-164.
- 308. Mnuskin, V.Ye.; Nikiforov, V.G.; Tokareva, A.N.; Trinchuk, B.F. (). Raman conversion of dye laser radiation in vapors of alkali metals. KVEKA, no. 2, 1987, 391-394.
- 309. Rautian, S.G.; Safonov, V.P.; Chernobrod, B.M. (). Theoretical and experimental study on cooperative Raman scattering. IANFA, no. 8, 1986, 1513-1519. (RZFZA, 87/1L1134).
- 310. Shapiro, V.Ye. (IFSOAN). Vortex Raman resonances. ZETFA, v. 91, no. 4, 1986, 1280-1288.

c. Brillouin

- 311. Anikeyev, I.Yu.; Glazkov, D.A.; Gordeyev, A.A.; Zubarev, I.G.; Mironov, A.B.; Mikhaylov, S.I. (). Spatial structural of Stokes fields reflected under stimulated Brillouin scattering in light conductors. IANFA, no. 2, 1987, 289-298.
- 312. Demokritov, S.O.; Kreynos, N.M.; Kudinov, V.I. (IFP). Inelastic light scattering in antiferromagnetic EuTe. ZETFA, vol. 92, no. 2, 1987, 689-703.
- 313. Grishin, I.A.; Devyatykh, G.G.; Dianov, Ye.M.; Kiselev, N.I.; Plotnichenko, V.G.; Ritus, A.I.; Churbanov, M.F. (IOF). Investigation of optical and elastic properties of fluoride glass by a Brillouin scattering method. KVEKA, no. 2, 1987, 377-378.
- 314. Vasil'yev, A.F.; Yashin, V.Ye. (). Stimulated Brillouin scattering of focused beams in a gain medium. KVEKA, no. 1, 1987, 213-215.

d. Rayleigh

- 315. Karpov, O.V.; Kudryashov, Yu.Yu.; Petrov, G.D. (). Measurement of partial density of a two component laminar gas flow by the Rayleigh scattering method. ZPMFA, no. 1, 1987, 10-12.

5. Self-focusing

6. Acoustic Interaction

- 316. Anan'yev, Ye.G.; Pozhar, V.E.; Pustovoyt, V.I. (). Acoustooptical methods for the measurement of optical radiation spectra. OPSPA, vol. 62, no. 1, 1987, 159-165.
- 317. Belyy, V.N.; Voytenko, I.G.; Kulak, G.V. (). Diffraction of light waves by ultrasonic damping waves. DBLRA, no. 10, 1986, 894-897. (RZFZA, 87/2L63).
- 318. Bogdanov, S.V.; Mastikhin, V.M.; Sheloput, D.V. (IFPSOAN). Acoustooptical properties of KRS-5 monocrystals. AKZHA, no. 1, 1987, 98-101.
- 319. Bukhenskiy, A.F.; Yakovlev, V.I. (). Transient processes in acoustooptic spectrum analyzers. IVUZB, no. 9, 1986, 65-67. (RZFZA, 87/2P155).

320. Golokoz, P.P.; Oboznenko, Yu.L. (). Amplitude nonreciprocity of Bragg light diffraction using an ultrasonic traveling wave. RAE LA, no. 1, 1987, 15-21.
321. Gulyayev, Yu.V.; Proklov, V.V.; Sokolovskiy, S.V.; Sotnikov, V.N. (). Acoustooptic device for analog and digital data processing. RAE LA, no. 1, 1987, 169-181.
322. Gusev, V.E. (MGU). Role of light absorption by free carriers in the process of optical excitation of longitudinal sound in semiconductors. AKZHA, no. 6, 1986, 778-784. (RZFZA, 87/2P76).
323. Kikkarin, S.M.; Petrov, D.V.; Yakovkin, I.B. (IFPSOAN). Surface acoustic waves in GaAlAs/GaAs structures. AKZHA, no. 1, 1987, 126-128.
324. Korolev, I.A.; Lependin, V.P.; Mal'tsev, A.A.; Cherepennikov, V.V. (GGU). Investigation of an adaptive system for the active cancellation of a narrowband acoustic field in a rectangular pool. IVYRA, no. 1, 1987, 70-78.
325. Mastikhin, V.M.; Nevskiy, Yu.Ye.; Sheloput, D.V. (). Wideband acoustooptic cell of a spectroanalyzer. AVMEB, no. 1, 1987, 101-102.
326. Mirgorodskiy, V.I.; Peshin, S.V. (). Effect of nonmonomodality of piezoconverters on the dynamic range of acoustooptic modulators of microwave spectroanalyzers. RAE LA, no. 1, 1987, 210-212.
327. Mityurich, G.S.; Shalupayev, S.V. (MGPI). Piezoelectric detection of a photoacoustic signal in gyrotropic media. ZTEFA, no. 1, 1987, 114-117.
328. Rysakov, V.M.; Aristov, Yu.V. (FTI). Principle limits to Bragg diffraction of light in the analysis of amplified acoustic noise in semiconductors. ZTEFA, no. 4, 1986, 750-752.
329. Yesepkina, N.A.; Lavrov, A.P.; Bondartsev, S.Yu.; Dravskikh, Z.V. (). Acoustooptic time-integrated correlator. PZTFD, no. 18, 1985, 1121-1126.

G. SPECTROSCOPY OF LASER MATERIALS

330. Agladze, N.I.; Vinogradov, Ye.A.; Popova, M.N. (ISAN). Evidence of quadrupole hyperfine interaction and interaction between levels in the optical spectrum of $\text{LiYF}(\text{sub}4)\text{-Ho}$ crystals. ZETFA, v. 91, no. 4, 1986, 1210-1218.
331. Batyayev, I.M.; Shilov, S.M.; Kaneva, Ye.N. (). Study on the spectral luminescence properties of the Er^{3+} ion in an inorganic aprotic $\text{GaCl}(\text{sub}3)\text{-SOCl}(\text{sub}2)\text{-ErCl}(\text{sub}3)$ system. ZPSBA, v. 45, no. 3, 1986, 419-424.
332. Dmitriyev, A.V.; Zhuravlev, Yu.F.; Pletnev, R.N.; Slepukhin, V.K. (UNTsIKh). Magnetic resonances of $(\text{sup}27)\text{Al}$ and $(\text{sup}31)\text{P}$ nuclei in glasses of the $\text{K}(\text{sub}2)\text{O-P}(\text{sub}2)\text{O}(\text{sub}5)\text{-xAl}(\text{sub}2)\text{O}(\text{sub}3)$ system. FKSTD, no. 5, 1986, 636-637.
333. Gorodetskiy, I.Ya.; Yermolovich, I.B.; Polisskiy, G.N. (IPANUK). Energy spectrum of localized centers in $\text{Zn}(\text{sub}x)\text{Cd}(\text{sub}1-x)\text{Se}$ single crystals. FTPPA, no. 1, 1987, 63-69.
334. Kostikov, Yu.P.; Kuz'mina, Ye.G. (). Spectra of electron-energy characteristic losses in LiF , NaF , and CsF crystals using X-ray electronic spectroscopy data. OPSPA, vol. 62, no. 1, 1987, 82-85.
335. Levin, M.B.; Snegov, M.I.; Cherkasov, A.S. (). Generation of stimulated radiation by dye-mixture aqueous-micellar solutions under lamp pumping. OPSPA, vol. 62, no. 1, 1987, 131-135.
336. Mares, J.A.; Kubelka, J.; Kvapil, J. (). Luminescence properties of YAG:Nd,Ce and YAG:Nd single crystals and their relation to laser properties (in English). CZYPA, v. B36, no. 9, 1986, 1079-1089. (RZFZA, 87/1L538).
337. Smol'skaya, L.P.; Martynovich, Ye.F.; Davydchenko, A.G.; Smirnova, S.A. (). X-ray and thermostimulated luminescence of YAG. ZPSBA, v. 46, no. 1, 1987, 56-60.
338. Tkachuk, A.M.; Klokishner, S.I.; Poletimova, A.V.; Mogileva, L.M.; Petrov, M.V.; Podkolzina, I.G.; Semenova, T.S. (). Probability of intracenter transitions and luminescence self-quenching in $\text{SrF}(\text{sub}2)\text{-2ErF}(\text{sub}3)$ and $\text{SrF}(\text{sub}2)\text{-2HoF}(\text{sub}3)$ systems. VINITI. Deposit, no. 6522-V86. (ZPSBA, v. 46, no. 1, 1987, 164-165).

339. Yermakov, O.N. (). Breakdown electroluminescence spectra in structures based on solid solutions of $\text{Ga}(\text{subl-x})\text{Al}(\text{subx})\text{P}(\text{As})$. ZPSBA, v. 46, no. 2, 1987, 226-231.
340. Yermakov, O.N.; Ignatkina, R.S.; Karatsyuba, A.P.; Sushkov, V.P.; Aksenov, V.F. (). Reference radiation sources based on $\text{In}(\text{subl-x})\text{Ga}(\text{subx})\text{P}$ solid solutions. ZPSBA, v. 46, no. 1, 1987, 159-162.
341. Yuzhakov, V.I.; Naumov, A.V. (). Effect of the nature of electrolytes on the spectral luminescence properties of xanthene dyes. ZFKHA, no. 10, 1986, 2518-2521. (RZFZA, 87/1L490).

H. ULTRASHORT PULSE GENERATION

342. Alentsev, B.M.; Bykova, O.G.; Romashkov, A.P. (). Using mode lock in gas-discharge lasers to form calibrated optical signals in the subnanosecond range. Fotometriya i yeye metrologicheskoye obespecheniye. CVNTKFMO, 6th, 27-31 Oct 1986. Tezisy dokladov. Moskva, 1986, 8. (RZRAB, 87/2Yel87).
343. Bykovskiy, Yu.A.; Dedushenko, K.B.; Yegorov, S.A. (). Forming a sequence of short pulses by an injection laser. Fotometriya i yeye metrologicheskoye obespecheniye. CVNTKFMO, 6th, 27-31 Oct 1986. Tezisy dokladov. Moskva, 1986, 54. (RZRAB, 87/2Yel49).
344. Dovchenko, D.N.; D'yakov, V.A.; Kuznetsov, V.I.; Pryalkin, V.I.; Simonov, A.V. (MGU). Quasi-c-w picosecond pulse generator using a YAG laser with frequency doubling in a $\text{KTiOPO}(\text{sub4})$ crystal. IANFA, no. 2, 1987, 259-260.
345. Korenchenko, A.Ye.; Platonenko, V.T.; Taranukhin, V.D. (MGU). Amplification of picosecond UV pulses in XeCl amplifiers. IANFA, no. 2, 1987, 215-218.

J. CRYSTAL GROWING

K. THEORETICAL ASPECTS OF ADVANCED LASERS

346. Kvasil, B. (). Pumping of an open resonator by ultrarelativistic electrons (in Czech). Stud. CSAV, no. 11, 1986, 89 p. (RZFZA, 87/1L889).
347. Oganessian, S.G.; Yengibaryan, V.A.; Abadzhyan, S.V. (). Effect of the angular spread of electron beams on stimulated Compton scattering. IAAFA, no. 4, 1986, 218-220. (RZFZA, 87/1L892).

348. Varfolomeyev, A.A.; Pitatelev, M.M. (IAE). Generation of external laser field harmonics by an electron beam in a multicomponent undulator with an axial field. KVEKA, no. 2, 1987, 288-294.

L. GENERAL LASER THEORY

349. Babenko, S.M.; Markin, A.S. (MIREA). Numerical study on multimode lasing in solid-state lasers, allowing for the thermal drift of luminescence lines. VINITI. Deposit, no. 7199-V, 14 Oct 1986, 18 p. (RZFZA, 87/1L969).
350. Belov, A.L.; Bunkin, F.V.; Yakovlenko, S.I. (IOF). Amplification of spontaneous emission without a resonator under recombination pumping. KVEKA, no. 1, 1987, 55-61.
351. Bukhenskiy, M.F.; Novikov, V.D. (). Conferences on quantum electronics and related fields of science in 1987. KVEKA, no. 1, 1987, 222-223.
352. Genkin, G.M.; Okomel'kov, A.V.; Tokman, I.D. (IPF). Population inversion under interzone pumping in slotless semiconductors. PZTFD, no. 1, 1987, 30-35.
353. Ivanov, S.V.; Panchenko, V.Ya. (MGU). Absorption of infrared radiation at weakly forbidden transitions in triatomic molecules. KVEKA, no. 1, 1987, 210-213.
354. Katanayev, I.I.; Troshin, A.S. (LGPI). Theory of generation of sub-Poisson radiation. Rate equations with Langevin sources. ZETFA, vol. 92, no. 2, 1987, 475-483.
355. Klimov, A.B. (FIAN). Heating fluctuations in a quantum oscillator thermostat. KRSFA, no. 9, 1986, 20-22. (RZFZA, 87/1L856).
356. Klimovskiy, I.I.; Selezneva, L.A. (). Effect of self-absorption of stimulated emission on the lasing characteristics of self-limited transition lasers. Inversnaya zaselennost' i generatsiya na perekhodakh v atomakh i molekulakh. CVSIZGPA, Tomsk, 1986. Tezisy dokladov. Part 1. Tomsk, 1986, 141-142. (RZRAB, 87/1Yel0).
357. Lyubar', N.N.; Chekalinskaya, Yu.I.; Chechenina, Ye.P. (IFANB). Effect of the duration of an amplified polarized pulsed signal on the output characteristics of a regenerative amplifier with a Fabry-Perot resonator and a Faraday element. DBLRA, no. 1, 1987, 20-23.

358. Nekrashevich, Ya.I.; Orlov, L.N. (). Lasing in c-w lasers at rotational transitions of molecules under optical pumping. Inversnaya zaselennost' i generatsiya na perekhodakh v atomakh i molekulakh. CVSI2GPA, Tomsk, 1986. Tezisy dokladov. Part 1. Tomsk, 1986, 101-102. (RZRAB, 87/2Yel3).
359. Panchenko, V.Ya.; Tolstoshein, A.Yu. (MGU). Optimization of the conditions of rotary excitation of a molecular gas. KHFID, no. 1, 1987, 16-20.
360. Samson, A.M.; Turovets, S.I. (IFANB). Instabilities in lasers with periodic modulation of the parameters. IFANB. Preprint, no. 438, 1986, 52 p. (RZFZA, 87/1L918).
361. Sitenko, A.G. (Ukrainian spelling: Sytenko, O.G.) (biographic subject). (). Sixtieth birthday of A.G. Sitenko, Academician of the Academy of Sciences Ukrainian SSR. VNUKA, no. 2, 1987, 104.
362. Smirnov, V.S.; Fazliyev, A.Z. (IOA). Transitions between metastable states in a two-dimensional model. IVUFA, no. 2, 1987, 120-122.
363. Zlatarov, V.K.; Dinov, R.V. (). Improving the parameters of decoupled optical amplifiers (in Bulgarian). IVMEA, no. 6, 1984(1985), 109-1115. (RZRAB, 87/1Yel97).

II. LASER APPLICATIONS

A. BIOLOGICAL EFFECTS

364. Arbiyeva, Z.Kh.; Kalmykov, P.V.; Dobrov, Ye.N.; Yesenaliyev, R.O.; Morev, P.G.; Nikogosyan, D.N. (). Formation of a cross-linking with protein and breaks in a ribonucleic acid in situ under the action of high-intensity picosecond infrared laser radiation. DANKA, vol. 292, no. 1, 1987, 227-230.
365. Konarski, S. (). Safety in using laser equipment. Part 2. Types of radiation sources (in Polish). Automatyka kolejowa, no. 4-5, 1986, 81-86. (RZRAB, 87/2Yel).
366. Lantukh, V.V.; Pyatin, M.M.; Iskakov, I.A.; Ishchenko, V.N.; Kochubey, S.A.; Razhev, A.M.; Chebotarev, V.P. (ITF). Using UV excimer lasers in microsurgery of the eye. ITF. Preprint, no. 151, 1986, 17 p. (RZFZA, 87/2L1239).
367. Samokhvalova, N.S. (IEMEZh). Effect of helium-neon laser rays on the spleen of intact and X-ray-irradiated mice. DANKA, vol. 292, no. 3, 1987, 729-733.
368. Samokhvalova, N.S. (IEMEZh). Role of the fractionation of the dose of red laser rays in a pulsed regime and their influence on the spleen of mice which are intact and exposed to X-ray radiation. DANKA, vol. 292, no. 4, 1987, 933-997.
369. Semenov, A.D.; Magaramov, D.A.; Kryl', L.A.; Futoryan, L.M. (MNIIMG). Results of 2000 operations with a YAG laser for dissecting secondary cataracts. VEOFA, no. 1, 1987, 18-21.

B. COMMUNICATIONS SYSTEMS

370. Abramov, A.A.; Bubnov, M.M.; Vechkanov, N.N.; Gur'yanov, A.N.; Konov, A.S.; Myakov, V.N.; Troitskiy, B.B.; Shchebunyayev, A.G (IOF). Temperature resistance of fiberoptic modules. Volokonnaya optika. IOF. Trudy, no. 5, 1987, 72-82.
371. Aganina, G.A.; Glazov, A.I.; Nuzhdin, I.V.; Timashkevich, O.G.; Tikhomirov, S.V.; Ulanovskiy, M.V. (). Sample means to measure low-level average power [in fiberoptic information transmission systems]. Fotometriya i yeye metrologicheskoye obespecheniye. CVNTKFMO, 6th, 27-31 Oct 1986. Tezisy dokladov. Moskva, 1986, 18. (RZMIB, 87/2.32.1189).

372. Aksenov, Ye.T.; Kukharev, A.V.; Lipovskaya, M.Yu.; Lipovskiy, A.A.; Pavlenko, A.V. (LPI). Investigation of the diffusion characteristics of titanium during the shaping of optical waveguides in lithium niobate substrates. ZTEFA, no. 1, 1987, 146-151.
373. Andrushko, L.M.; Karplyuk, K.S.; Ostrovskiy, S.B. (). Propagation of solitons in coupled optical fibers. RAELA, no. 2, 1987, 427-429.
374. Andrushko, L.M.; Voznesenskiy, V.A.; Felinskiy, G.S. (OEIS). Diffraction of surface optical waves using a thermostimulated phase grating in titanium-diffused waveguides in lithium niobate. ZTEFA, no. 1, 1987, 176-177.
375. Avrutskiy, I.A.; Sychugov, V.A. (IOF). Reflection of a confined beam of light from the surface of a periodic perturbed waveguide. ZTEFA, no. 2, 1987, 386-388.
376. Bacherikov, V.V.; Kravtsov, V.Ye.; Luzanov, V.B.; Kudryavtsev, V.V.; Masanova, N.P. (). Developing a high-accuracy device to verify sample means for measuring the distance to rupture sites in lightguides. Fotometriya i yeye metrologicheskoye obespecheniye. CVNTKFM0, 6th, 27-31 Oct 1986. Tezisy dokladov. Moskva, 1986, 19. (RZMIB, 87/2.32.1188).
377. Bacherikov, V.V.; Kudryavtsev, V.V.; Kravtsov, V.Ye.; Lobanova, Ye.S. (). Using optical delay lines to verify instruments for measuring the frequency characteristics of fiber lightguides. Fotometriya i yeye metrologicheskoye obespecheniye. CVNTKFM0, 6th, 27-31 Oct 1986. Tezisy dokladov. Moskva, 1986, 58. (RZMIB, 87/2.32.1351).
378. Banket, V.L. (). Noise immunity and efficiency of information transmission systems. EKVZA, no. 2, 1987, 63-67.
379. Belanov, A.S.; Dianov, Ye.M.; Krivenkov, V.I. (IOF). Dispersion characteristics of three-layer elliptic lightguides. Volokonnaya optika. IOF. Trudy, no. 5, 1987, 3-18.
380. Belanov, A.S.; Golovchenko, Ye.A.; Dianov, Ye.M.; Nikonova, Z.S.; Prokhorov, A.M.; Serkin, V.N. (IOF). Problems of transmitting information by optical solitons. Volokonnaya optika. IOF. Trudy, no. 5, 1987, 35-59.

381. Belovolov, M.I.; Kryukov, A.P.; Kuznetsov, A.V.; Pencheva, V.Kh. (IOF). Elements of fiberoptic communication lines and methods for studying them. Volokonnaya optika. IOF. Trudy, no. 5, 1987, 125-136.
382. Bochkar', Ye.P.; Zakharov, A.I.; Polyakov, S.N.; Samorodov, V.A. (NIIYaF). Analog-digital optical communication line for telemetric devices. PRTEA, no. 1, 1987, 134-138.
383. Bogatyrev, V.A.; Bubnov, M.M.; Vechkanov, N.N.; Gur'yanov, A.N.; Semenov, S.L. (IOF). Strength of long-length glass fiber lightguides. Volokonnaya optika. IOF. Trudy, no. 5, 1987, 60-72.
384. Borisevich, V.G.; Devyatykh, G.G.; Dianov, Ye.M.; Ignat'yev, S.V.; Plotnichenko, V.G.; Skripachev, I.V.; Churbanov, M.F.; Shipunov, V.A.; Shirayev, V.S. (IKhAN). Low-temperature photoinduced variations in optical losses in fiber waveguides based on chalcogenide glass. PZTFD, no. 1, 1987, 35-38.
385. Bublyayev, R.A.; Levin, V.V.; Marasin, L.Ye.; Popov, Yu.V.; Kharberger, L.Yu. (). Photorefractive in lithium niobate planar waveguides. OPSPA, v. 61, no. 1, 1986, 185-187.
386. Buzulutskov, A.F.; Vasil'chenko, V.G.; Turchanovich, L.K. (IFVE). Fiberoptic information display from a wire chamber operating under heavy current. PRTEA, no. 1, 1987, 47-49.
387. Bykov, A.M.; Gopman, A.B. (). Correlational holographic conversion and transmission of images through an individual multimode fiber. Fotometriya i yeye metrologicheskoye obespecheniye. CVNTKFMO, 6th, 27-31 Oct 1986. Tezisy dokladov. Moskva, 1986, 263. (RZRAB, 87/2Ye516).
388. Dianov, Ye.M.; Karpechev, V.N.; Karpychev, N.S.; Korniyenko, L.S.; Mazavin, S.M.; Miroshnichenko, S.I.; Rybaltovskiy, A.O.; Chernov, P.V. (IOF). Effect of industrial factors on the formation of radiation color centers in glass fiber lightguides. FKSTD, no. 5, 1986, 555-561.
389. Dmitriyev, A.L.; Ivanov, A.V. (). Hologram element of a demultiplexer of a lightguide communication system. OPSPA, vol. 62, no. 1, 1987, 149-153.

390. Dumarevskiy, Yu.D.; Zemskov, K.I.; Kazaryan, M.A.; Kovtonyuk, N.F.; Medvedeva, L.V.; Petrash, G.G.; Savin, A.I. (FIAN). Projection of images onto a large screen using MDS-LC cells and quantum amplifiers. DANKA, vol. 292, no. 3, 1987, 604-607.
391. Dyuzhikov, I.N.; Yelinson, M.I. (). Multimode optical waveguides induced by a thermo-optic effect. RAEIA, no. 1, 1987, 187-189.
392. Genkin, V.N. (IPF). Optical methods in submicron lithography. IANFA, no. 2, 1987, 372-377.
393. Glazov, A.I.; Muravskaya, N.P.; Timashkevich, O.G.; Tikhomirov, S.V. (). Metrological certification of means to measure average power for fiberoptic communications systems. Fotometriya i yeye metrologicheskoye obespecheniye. CVNTKFMO, 6th, 27-31 Oct 1986. Tezisy dokladov. Moskva, 1986, 20. (RZMIB, 87/2.32.1176).
394. Gol'dfarb, I.S.; Zarkevich, Ye.A.; Muradyan, A.G.; Smirnov, V.I. (). Current state of development of fiberoptic transmission systems. EKVZA, no. 2, 1987, 43-47.
395. Grudinin, A.B.; Sulimov, V.B. (IOF). Coherent and polarization properties of radiation in single-mode fiber lightguides. Volokonnaya optika. IOF. Trudy, no. 5, 1987, 18-35.
396. Gur'yanov, A.N.; Dianov, Ye.M.; Lavrishchev, S.V.; Mazavin, S.M.; Mashinskiy, V.M.; Neustruyev, V.B.; Sokolov, N.I.; Khopin, V.F. (). Radial distribution of impurity defects in preforms for fiber lightguides based on germanium dioxide quartz glass. FKSTD, no. 3, 1986, 359-364. (RZFZA, 87/1L729).
397. Ivanov, V.N.; Kondrat'yev, V.A.; Nikitin, V.A.; Prokhorov, V.P.; Yakovenko, N.A. (). Obtaining of the elements of integrated optics by a method of diffusion by a localized electric field. AVMEB, no. 1, 1987, 97-99.
398. Kanka, J. (). Modeling of the damping characteristics of optical quartz polymer fibers and their measurement by backscattering (in Czech). ELKCA, no. 6, 1986, 457-469. (RZFZA, 87/1L47).
399. Karasek, M. (). Effect of perturbations in the refractive index profile on the width of the passband of multimode fiber lightguides (in Czech). ELKCA, no. 6, 1986, 470-479. (RZFZA, 87/1L50).

400. Klevitskiy, B.G.; Sedykh, D.A.; Sokolovskiy, A.A. (). Determination of equivalent step-index parameters for single-mode graded-index fibers. RAE LA, no. 1, 1987, 184-186.
401. Kozlovskiy, V.V. (). Synthesis of inhomogeneous dielectric plane waveguides by cut-off frequencies of TE and TM modes. RAE LA, no. 2, 1987, 432-434.
402. Krivoshlykov, S.G.; Sisakyan, I.N.; Yanchenko, S.N. (IOF). Quasi-modes in graded-index waveguides with large-scale periodic longitudinal inhomogeneity. IOF. Preprint, no. 206, 1986, 42 p. (RZFZA, 87/1Zh266).
403. Kuznetsov, A.A. (IOF). Transmission of information by spectral multiplexing. Volokonnaya optika. IOF. Trudy, no. 5, 1987, 136-145.
404. Mashinskiy, V.M. (IOF). Optical properties of germanosilicate glass for low-loss fiber lightguides. Volokonnaya optika. IOF. Trudy, no. 5, 1987, 82-93.
405. Pohlack, H. (). Highly efficient recording media for obtaining microstructures on optical plates (in German). Beitrage zur Optik und Quantenelektronik. Band 11. Dresden, 1986, 78-79. (RZRAB, 87/2Ye303).
406. Red'ko, V.P.; Shteyngart, L.M. (). Planar optical waveguides obtained in quartz glass irradiated by light-weight ions. VBSFA, no. 4, 1986, 58-62. (RZFZA, 87/1L72).
407. Rysanek, V. (). Lightguide fiber for lightguides which transmit light excited by UV radiation, e-beams or ion beams. Author's certificate Czechoslovakia, no. 230626, 15 May 1986. (RZMIB, 87/2.32.1356).
408. Shatalov, F.A. (). Effect of pressure and tension on the phase shift of polarization modes in a single-mode fiber lightguide with birefringence. OPSPA, vol. 62, no. 2, 1987, 472-474.
409. Shchepkina, Ye.D. (). Synthesis of modeless dielectric waveguides in the case of sharp asymmetry. RAE LA, no. 2, 1987, 429-431.
410. Solov'yev, V.V.; Nesterova, Z.V.; Petrovskiy, G.T. (). Effect of stimulated Brillouin scattering on the characteristics of radiation from stimulated Raman components in multimode fiberoptic waveguides. KVEKA, no. 2, 1987, 384-386.

411. Stashkevich, A.A.; Kalinikos, B.A.; Kovshikov, N.G.; Rutkin, O.G.; Sigayev, A.N.; Ageyev, A.N. (LETI). Observation of waveguide interaction of light with internal spin waves in yttrium-iron garnet films. PZTFD, no. 1, 1987, 49-53.
412. Surodin, M.P.; Tikhomirov, S.V. (). Effect of the radiation spectrum of the source, on errors in measuring damping in fiber lightguides. Fotometriya i yeye metrologicheskoye obespecheniye. CVNTKFM0, 6th, 27-31 Oct 1986. Tezisy dokladov. Moskva, 1986, 61. (RZMIB, 87/2.32.1352).
413. Troitskiy, B.B.; Troitskaya, L.S. (). Polymers in fiberoptics. Fiziko-khimicheskiye osnovy sinteza i pererabotki polimerov. Gor'kiy, 1986, 3-16. (RZFZA, 87/2L634).
414. Tutubalin, V.N.; Shatrov, A.D. (). Adiabatic model for the calculation of pulsed responses of multimode fiber lightguides. RAELA, no. 1, 1987, 54-61.
415. Zolotov, Ye.M.; Tavlykayev, R.F. (IOF). Rigid joining of a LiNbO_3 :Ti channel waveguide with single-mode fiber-optic waveguides. KVEKA, no. 2, 1987, 421-422.

C. BEAM PROPAGATION

1. Theory

416. Belenov, E.M.; Moroz, T.Z.; Romanenko, V.I.; Sobolev, A.G.; Uskov, A.V. (ISAN). Radiation of light from the propagation of surface electromagnetic waves along a metal-dielectric interface with a spatially inhomogeneous index of refraction. PFKMD, no. 11, 1986, 21-26. (RZFZA, 87/2L397).
417. Chukanov, V.N.; Kuligin, A.P. (UrPI). Homogeneous condensation of light-weight and heavy water vapor at pressures up to 2 megapascals. TVYTA, no. 1, 1987, 70-77.
418. Dik, V.P.; Ivanov, A.P.; Loyko, V.A. (). Effect of the particle concentration on the angular structure of scattered radiation. ZPSBA, v. 45, no. 2, 1986, 297-301.
419. Gavrilenko, V.G.; Stepanov, N.S. (GGU). Statistical characteristics of waves in chaotic media with space-time inhomogeneities. IVYRA, no. 1, 1987, 3-35.

420. Geshev, P.I. (ITF). Thermal wave method for investigating the structure of a viscous sublayer. TVYTA, no. 1, 1987, 130-134.
421. Gochelashvili, K.S.; Starodumov, A.N.; Uzunov, I.M. (IOF). Fluctuations in the level of a short laser pulse in a turbulent medium with thermal nonlinearity. IOF. Preprint, no. 279, 1986, 12 p. (RZFZA, 87/1L1183).
422. Goncharenko, A.M.; Kukushkin, V.G.; Shapovalov, P.S. (IFANBMo). Propagation of light beams in inhomogeneous nonlinear media. KVEKA, no. 2, 1987, 375-376.
423. Goryachev, B.V.; Larionov, V.V.; Mogil'nitskiy, S.B.; Savel'yev, B.A. (). Clearing from the passage of radiation through a medium with a high volume concentration of scatterers. OPSPA, v. 61, no. 2, 1986, 423-424.
424. Kandidov, V.P.; Shlenov, S.A. (). Statistics of strong fluctuations of light radiation in randomly inhomogeneous media. VINITI. Deposit, no. 7647-V, 10 Nov 1986, 9 p. (RZFZA, 87/2L21).
425. Kindyak, A.S.; Gribkovskiy, V.P.; Khasanov, O.Kh. (IFANB). Effects of the passage of ultrashort pulses through non-centrosymmetric media. IFANB, Preprint, no. 441, 1986, 30 p. (RZFZA, 87/2L1120).
426. Kolesnik, A.I.; Ivanov, A.P. (). Signal/noise ratio in pulsed light probing of objects in scattering media. VBSFA, no. 4, 1986, 53-58. (RZFZA, 87/1L667).
427. Krivoruchko, K.A.; Reshetin, V.P.; Soloukhin, R.I. (). Transport and absorption of infrared radiation in metal capillaries. DBLRA, no. 8, 1986, 696-699. (RZFZA, 87/2L47).
428. Kukushkin, V.G. (GrodGU). Eigenmodes in a gyrotropic inhomogeneous medium. KVEKA, no. 1, 1987, 195-197.
429. Kukushkin, V.G. (GrodGU). Gaussian light beam in a lens-like medium with nonlinear complex susceptibility. KVEKA, no. 1, 1987, 197-199.
430. Kuz'mina, M.G. (IPM). Formulation of the problem of polarized radiation transfer in planar layers of optically active scattering media. IPM. Preprint, no. 110, 1986, 27 p. (RZFZA, 87/2L15).

431. Mamayev, A.V.; Orazov, K.; Pilipetskiy, N.F.; Shkunov, V.V. (IPMe). Transient self-diffraction of variously inclined beams. KVEKA, no. 2, 1987, 413-415.
432. Skochilov, A.F. (). Study on the degree of ellipticity of a wave diffracted by a three-dimensional phase grating. OPSPA, v. 61, no. 4, 1986, 801-805.
433. Sotskiy, B.A.; Glazachev, B.I.; Dmitriyev, V.A. (IFANB). Quantum statistical description of the superposition of independent random optical fields. DBLRA, no. 1, 1987, 28-31.
434. Starik, A.M. (). Cooling of a diatomic molecular gas under amplification of light. KHFID, no. 11, 1986, 1496-1500.
435. Trofimov, V.A. (). Numerical modeling of the propagation of optical radiation in a liquid droplet medium. RAELA, no. 10, 1986, 1930-1938.
436. Vardanyan, R.S. (). Radiation transfer in one-dimensional stochastic media. IAAFA, no. 4, 1986, 184-190. (RZFZA, 87/2L16).
437. Varnavskiy, O.P.; Golovlev, V.V.; Kirkin, A.N.; Mozharovskiy, A.M.; Popov, M.B. (FIAN). Coherent absorption processes of small-area pulses. FIAN. Preprint, no. 204, 1986, 19 p. (RZFZA, 87/1L861).
438. Veklenko, B.A.; Tkachuk, G.B. (MEI). Kinetics of the reflection of resonant radiation from excited gaseous media. IVUFA, no. 2, 1987, 89-93.
439. Zhizhin, G.N.; Silin, V.I.; Yakovlev, V.A. (ISAN). Spectroscopy of surface electromagnetic waves and surface polaritons at high damping values of surface waves. ISAN. Preprint, no. 17, 1986, 40 p. (RZFZA, 87/2L395).
440. Zhizhin, G.N.; Silin, V.I.; Yakovlev, V.A. (ISAN). Diffraction and interference effects in surface electromagnetic waves. ISAN. Preprint, no. 19, 1986, 47 p. (RZFZA, 87/2L396).
441. Zhuk, N.P. (). Reflection and passage of electromagnetic waves in the case of a rough interface. OPSPA, v. 61, no. 3, 1986, 560-565.
442. Zimin, A.B.; Petrov, N.S. (). Deformation of light pulses during reflection from amplifying media. DBLRA, no. 10, 1986, 890-893. (RZFZA, 87/2L1123).

2. Propagation in the Atmosphere

- 443. Asanovskiy, E.I.; Vasilyak, L.M.; Nesterkin, O.P. (IVTAN). Pulsed electric discharge in the atmosphere at atmospheric pressure, controlled by a long laser spark. PZTFD, no. 4, 1987, 249-254.
- 444. Belen'kiy, M.S.; Kopytin, Yu.D.; Penin, S.T. (IOA). Statistics of breakdown sites during the propagation of laser radiation through a turbulent atmosphere. IVUFA, no. 2, 1987, 75-79.
- 445. Belov, M.L.; Orlov, V.M. (). Spatial structure of illumination intensity behind the receiving lens in an observational ranging system. OPSPA, v. 60, no. 6, 1986, 1290-1291.
- 446. Berezovskiy, V.V.; Gergel', I.V.; Igumnov, Ye.A.; et al. (). Laser gas analyzer for diagnostics of ammonia in the atmosphere from aircraft. Gazovyye lazery v metrologii. MIFI. Moskva, Energoatomizdat, 1986, 66-71. (Tochnyye izmereniya i kvantovaya elektronika, no. 39, VNIIM, 1987, 162).
- 447. Budak, V.P.; Gutorov, M.M.; Fedosov, V.P. (). Dependence of the image quality of an object on the position of a layer of increased turbidity. Svetotekhnika, no. 11, 1986, 19-21. (RZFZA, 87/1L585).
- 448. Demin, V.V. (). Holographic determination of the integral characteristics of scattering media. Fotometriya i yeye metrologicheskoye obespecheniye. CVNTKFMO, 6th, 27-31 Oct 1986. Tezisy dokladov. Moskva, 1986, 257. (RZRAB, 87/2Ye506).
- 449. Gagarin, S.P.; Kalinkevich, A.A.; Kolarov, G.V.; Kutuza, B.G.; Mikhalev, M.A.; Mitsev, Ts.; Stoykova, Ye.; Stoyanov, D.V.; Ferdinandov, Ye.S.; Khaimov, S.Zh. (IRE). Experiments on studying the atmosphere by microwave radiometry and lidar. IFAOA, no. 2, 1987, 121-129.
- 450. Gordov, Ye.P.; Zhiliba, A.I. (). Remote probing of atmospheric gases by optical parametric oscillators. Tomskiy filial Sibirskogo otdeleniya Akademii nauk SSSR. Preprint, no. 21, 1986, 14 p. (RZFZA, 87/1L834).
- 451. Grigor'yev, P.V.; Lomonosov, A.M.; Solntsev, M.V. (IOF). Study on the statistical properties of reflected signals in laser probing of the sea surface. IANFA, no. 2, 1987, 210-214.

452. Kokhanov, V.I.; Nebol'sin, M.F.; Chistyakova, L.K. (IOA). Scattering of optical radiation by exploding particles in a water fog. IVUFA, no. 2, 1987, 79-84.
453. Kostin, V.P. (). Estimating the relative magnification of energy potential in laser devices necessary to compensate for atmospheric modulating noise. Informsvyaz'. Deposit, no. 951-sv, 10 Oct 1986, 6 p. (RZFZA, 87/2L1231).
454. Kozintsev, V.I.; Nikiforov, V.G.; Sil'nitskiy, A.F.; Simonov, A.P. (). Effect of back scattering interference on the operation of a remote gas analyzer. ZPSBA, v. 46, no. 2, 1987, 211-218.
455. Kubyshkin, A.P.; Kuznetsov, V.I.; Migulin, A.V.; Roy, I.N.; Kholodnykh, A.I. (MGU). Measuring humidity by a parametric lidar. IANFA, no. 2, 1987, 219-223.
456. Manakov, S.V.; Novokshenov, V.Yu. (). Total asymptotic representation of an electromagnetic pulse in a long two-level amplifier. TMFZA, no. 1, 1986, 40-54. (RZFZA, 87/1L853).
457. Micsinai, T.; Nagy, J. (). Experiments on atmospheric propagation of optical waves (in Hungarian). Posta kiserleti intezet kozlemenyekek, vol. 34, 1986, 257-271, 8, 12, 16, 20. (RZRAB, 87/2Ye225).
458. Mitsel', A.A.; Ponomarev, Yu.N.; Firsov, K.M. (IOA). Nonlinear spectroscopic effects on the propagation of intense laser radiation in the atmosphere at 10.6 um. IFAOA, no. 2, 1987, 165-169.
459. Prishival'ko, A.P.; Semenov, L.P.; Astaf'yeva, L.G.; Leyko, S.T. (IFANB). Study on thermal destruction of spherical ice particles under radiation at 10.6 um. IFANB. Preprint, no. 437, 1986, 39 p. (RZFZA, 87/2Ye1078).
460. Rumyantseva, N.A.; Tantashev, M.V. (GOI). Effect of a turbulent atmosphere on the transfer of a target image. OPMPA, no. 9, 1986, 57-58.
461. Samokhvalov, I.V.; Vorevodin, Yu.M.; Matviyenko, G.G. (). Laser measurements of instantaneous values of the transverse velocity of wind. CVSRadme, 7th, Suzdal', Oct 1986. Tezisy dokladov. Moskva, 1986, 133. (RZRAB, 87/2Ye437).
462. Sorokin, Yu.M. (GGU). "Cold confluence" effect. Low-intensity threshold of optical breakdown in aerosol media. ZTEFA, no. 7, 1986, 1431-1433.

463. Vorob'yev, V.V.; Myakinin, V.A.; Stepashkin, V.N.; Tikhonova, N.S. (IFA). Change of coherence and intensity fluctuations of steady-state phase modulated pulsed laser radiation under thermal blooming. IVYRA, no. 1, 1987, 56-64.
464. Zemlyanov, A.A.; Geynts, Yu.E. (). Phase explosion in the interaction between laser radiation and aqueous aerosols. VINITI. Deposit, no. 7057-V, 8 Oct 1986, 66 p. (RZFZA, 87/1L1208).
465. Zurabyan, A.Z.; Tibilov, A.S. (). Determination of the statistical characteristics of sea surface slopes by an optical radar. IFAOA, no. 2, 1987, 194-199.
466. Zuyev, V.V.; Romanovskiy, O.A. (). Using differential absorption to minimize errors in reconstructing vertical profiles of humidity from laser probing. CVSRadme, 7th, Suzdal', Oct 1986. Tezisy dokladov. Moskva, 1986, 134. (RZRAB, 87/2Ye436).

3. Propagation in Liquids

467. Kazenin, D.A.; Karlov, S.P.; Cherenkov, Ye.I.; Shitikov, Ye.S.; Shurgal'skiy, E.F. (MIKhM). Onset of periodic structures under the action of a laser beam on anomalously stratified layers of a liquid. TsINTIkhimneftemash. Deposit, no. 1587-KhN, 20 Aug 1986, 12 p. (RZFZA, 87/1I96).
468. Kazenin, D.A.; Karlov, S.P.; Shitikov, Ye.S.; Shurgal'skiy, E.F. (). Formation of convective structures under the action of laser radiation on a liquid phase surface. FKOMA, no. 1, 1987, 137-138.
469. Kul'skiy, L.A.; Goronovskiy, I.T.; Teselkin, V.V. (). Laser monitoring of impurities in water based on their phase-dispersion state. VNUKA, no. 2, 1987, 40-42.
470. Prilepskiikh, V.D.; Khanov, V.A. (NIIGAik). Laser interferometer for oceanographic research. VINITI. Deposit, no. 7398-V, 27 Oct 1986, 10 p. (RZGFA, 87/1V108).

4. Adaptive Optics

471. Anikeyev, I.Yu.; Gordeyev, A.A.; Zubarev, I.G.; Mironov, A.B.; Mikhaylov, S.I. (FIAN). Method for insulation in a laser system with wavefront reversal. KVEKA, no. 1, 1987, 207-210.
472. Apanasevich, P.A.; Afanas'yev, A.A.; Samson, B.A. (IFANB). Wavefront reversal under multiwave parametric mixing in resonance media. IANFA, no. 2, 1987, 270-279.
473. Arutyunov, Yu.A.; Zherdiyenko, V.V.; Khizhnyak, A.I. (IFANUK). Efficiency and quality of wavefront reversal in accompanying four-wave interactions. IANFA, no. 2, 1987, 347-357.
474. Basov, N.G.; Kovalev, V.I.; Fayzulloev, F.S. (FIAN). Media for wavefront reversal of CO₂ laser radiation. FIAN. Preprint, no. 262, 1986, 28 p. (RZFZA, 87/1L1132).
475. Basov, N.G.; Kovalev, V.I.; Fayzulloev, F.S. (FIAN). Media for wavefront reversal of CO₂ laser radiation. IANFA, no. 2, 1987, 280-288.
476. Basov, N.G.; Yefimkov, V.F.; Zubarev, I.G.; Sobolev, V.B. (FIAN). High-power laser systems in wavefront reversal. IANFA, no. 2, 1987, 323-329.
477. Belan, V.R.; Lazarenko, A.G.; Nikitin, V.M.; Polyakov, A.V. (IRE). Stimulated Brillouin scattering mirrors using capillary lightguides. KVEKA, no. 1, 1987, 205-207.
478. Bel'dyugin, I.M.; Galushkin, M.G.; Zolotarev, M.V.; Kamenets, F.F. (MFTI). Phase conjugation in a ring resonator with a four-wave mirror. IANFA, no. 2, 1987, 358-361.
479. Bel'dyugin, I.M.; Zolotarev, M.V.; Stepanov, A.A.; Shcheglov, V.A. (FIAN). Problem of simultaneous four-wave degenerate interaction of short pulses of light in sluggish media. Exact solution. KRSFA, no. 2, 1987, 31-33.
480. Ben', V.N.; Bondarenko, S.V.; Ivakin, Ye.V.; Rubanov, A.S. (IFANB). Effect of angular selectivity on representative properties of a four-wave wavefront reversal mirror. KVEKA, no. 2, 1987, 389-391.

481. Ben', V.N.; Ivakin, Ye.V.; Rubanov, A.S. (IFANB). Contrast inversion under wavefront reversal. IFANB. Preprint, no. 422, 1986, 7 p. (RZFZA, 87/1L1127).
482. Betin, A.A.; Sherstobitov, V.Ye. (IPF). Wavefront reversal of radiation in the medium IR. IANFA, no. 2, 1987, 299-306.
483. Bobrov, B.D.; Dmitriyev, Ye.I.; Snezhkov, G.Yu. (GOI). Using three-mirror shift interferometers to measure wavefront distortions of laser beams in the infrared. OPMPA, no. 2, 1987, 44-47.
484. Bobrov, S.T.; Gratsianov, K.V.; Kornev, A.F.; Lyubimov, V.V.; Pankov, V.G.; Stepanov, A.I.; Turkevich, Yu.G. (). Improving the quality of wavefront reversal in stimulated Brillouin scattering mirrors with smooth aberrations. OPSPA, vol. 62, no. 2, 1987, 402-406.
485. Borshch, A.A.; Kukhtarev, N.V.; Semioshko, V.N. (IFANUK). Wavefront reversal under vector self-diffraction by polarization holograms. IANFA, no. 2, 1987, 307-310.
486. Dzhotyan, G.P.; Bakos, J.S.; Karajian, G.N.; Juhasz, T. (). Theory of nonstationary phase conjugation by four-wave mixing (in English). KFKKA, Preprint, no. 25/E, 1986, 10 p. (RZFZA, 87/2L1077).
487. Galushkin, M.G.; Sviridov, K.A.; Seregin, A.M.; Cheburkin, N.V. (). Degenerate four-wave interaction in media with thermochemical nonlinearity. IANFA, no. 2, 1987, 318-322.
488. Galushkin, M.G.; Zemskov, Ye.M.; Klushin, V.N.; Onoshko, R.N.; Rubanov, A.S.; Sviridov, K.A. (IFANB). Degenerate four-wave interaction in media with photoinduced heat release from chemical reactions. IANFA, no. 2, 1987, 311-317.
489. Glaubitz, U.; Haferkorn, H. (). Schmidt system for smoothing image fields by holographic mirrors (in German). ANPYA, no. 3-5, 1986, 196-200. (RZFZA, 87/2L535).
490. Gochelashvili, K.S.; Starodumov, A.N.; Uzunov, I.M. (IOF). Evolution of initial distortions of wave beams in a nonlinear medium. KVEKA, no. 1, 1987, 199-201.

491. Kislenko, V.I.; Ovechko, V.S.; Strizhevskiy, V.L. (KGU). Probing of collective excitations occurring under stimulated scattering with wavefront reversal. IANFA, no. 2, 1987, 362-366.
492. Krivoshechekov, V.A.; Kapitskiy, Yu.V.; Pilipetskiy, A.N.; Shkunov, V.V. (IPMe). Wavefront reversal under stimulated Brillouin scattering in quartz and neodymium fiber lightguides. IPMe. Preprint, no. 274, 1986, 61 p. (RZFZA, 87/1zh267).
493. Kukhtarev, N.V.; Murav'yev, V.V.; Semenets, T.I. (IFANUK). Polarization characteristics of self-diffraction in photorefractive crystals [used for wavefront reversal and holographic interferometry]. IFANUK. Preprint, no. 19, 1986, 22 p.
494. Lazaruk, A.M. (IFANB). Contrast inversion in a conjugate image being reconstructed under four-wave mixing in media with reactive nonlinearity. KVEKA, no. 2, 1987, 418-420.
495. Lyubimov, V.V.; Mak, A.A.; Yashin, V.Ye. (). Problems in using wavefront reversal in laser systems. IANFA, no. 2, 1987, 330-339.
496. Novikov, A.D.; Odulov, S.G.; Soskin, M.S.; Khizhnyak, A.I. (IFANUK). Lasers using degenerate four-wave interactions. IFANUK. Preprint, no. 27, 1986, 36 p.
497. Sukhorukov, A.P.; Trofimov, V.A. (MGU). Numerical modeling of wavefront reversal under four-wave interactions. IANFA, no. 2, 1987, 340-346.
498. Ustinov, N.D.; Anufriyev, A.V.; Vol'pov, A.L.; Zimin, Yu.A.; Tolmachev, A.I. (). Active synthesis of an aperture during the observation of objects through a distorting media. KVEKA, no. 1, 1987, 187-189.
499. Vorontsov, M.A.; Kudryashov, I.A.; Shmal'gauzen, V.I. (MGU). Compensation for time-varying wavefront distortions by an adaptive system with a flexible mirror. KVEKA, no. 2, 1987, 231-232.
500. Vorontsov, M.A.; Matveyev, A.N.; Sivokon', V.P. (MGU). Optimal control of the wavefront in problems of radiation focusing in an arbitrary field. DANKA, v. 290, no. 6, 1986, 1354-1358.
501. Vysotina, N.V.; Rozanov, N.N.; Semenov, V.Ye. (). Efficiency of two-frequency phase conjugation for extended inhomogeneous paths. OPSPA, v. 60, no. 5, 1986, 1083-1087.

D. COMPUTER TECHNOLOGY

502. Akhmediyev, N.N.; Borisov, B.S.; Zuykov, V.A.; Samartsev, V.V.; Stel'makh, M.F.; Fomichev, A.A.; Yakshin, M.A. (). Reversed long-lived light echo in a crystal. ZFPRA, vol. 45, no. 3, 1987, 122-125.
503. Belovolov, M.I.; Dianov, Ye.M.; Karpov, V.I. (IOF). Fiber lightguide memories. Volokonnaya optika. IOF. Trudy, no. 5, 1987, 114-125.
504. Dolgov, M.V.; Plotnikov, A.F.; Popov, Yu.M.; Seleznev, V.N.; Yerben, I.V.; Sharf, V.; Vol'f, A. (FIAN). New reversible optoelectronic storage medium. KVEKA, no. 1, 1987, 190-192.
505. Korneyev, S.S.; Pan'shin, I.A.; Podpalyy, Ye.A.; Smelov, V.S. (). Optimal coding of input images in a holographic correlator. Fotometriya i yeye metrologicheskoye obespecheniye. CVNTKFM0, 6th, 27-31 Oct 1986. Tezisy dokladov. Moskva, 1986, 277. (RZRAB, 87/2Ye528).
506. Vasil'yev, V.V.; Naumov, K.P.; Ushakov, V.N. (). Video frequency acoustooptic correlator with time integration. RATEA, no. 11, 1986, 36-39. (RZFZA, 87/2Zh88).
507. Verenikina, N.M.; Rozhkov, O.V.; Timashova, L.N. (MVTU). Design of coherent optical processor systems. MVTU. Trudy, no. 466, 1986, 18-25. (RZRAB, 87/2Ye305).
508. Yerokhovets, V.K. (). Analysis and calculation of the energy characteristics of holographic document memories. FOOSD, no. 17, 1986, 53-62. (RZFZA, 87/2L736).
509. Zhuravlev, V.I.; Shinkevich, S.L.; Gridnev, V.A.; Konstantinov, A.N.; Korobov, V.V. (). System for inputting and processing of images. Problemno-oriyentirovannyye izmeritel'no-vychislitel'nyye komplekсы. Novosibirsk, 1986, 58-62. (RZFZA, 87/2A292).

E. HOLOGRAPHY

510. Bykovskiy, Yu.A.; Zarubin, A.M.; Larkin, A.I. (MIFI). Holographic recording in partially coherent fields based on the display of optical properties of an object in a correlation field of scattered radiation. MIFI. Preprint, no. 42, 1986, 31 p. (RZFZA, 87/2L718).
511. Darskiy, A.M. (). Angular selectivity of holograms recorded by beams with a limited aperture. FOOSD, no. 17, 1986, 117-122. (RZFZA, 87/2L731).
512. Gafner, A.Ye.; Podpalyy, Ye.A.; Smelov, V.S.; Sukhomlin, V.T.; Shilyadov, S.O. (). Two-layer films of gadolinium-cobalt + bismuth-containing garnet for holographic information recording. Fizika magnitnykh yavleniy. Irkutsk, 1986, 99-103. (RZFZA, 87/2N1101).
513. Gorlin, G.B.; Paritskiy, L.G.; Tisnek, T.V. (FTI). Photographic system for the recording of 10.6 μ m radiation. ZTEFA, no. 1, 1987, 159-161.
514. Gurinovich, A.V.; Kukonin, A.G. (). Using analog-to-digital conversion to record superimposed holograms. Avtomatizatsiya tekhniki podgotovki proizvodstva. Minsk, 1986, 107-1131. (RZRAB, 87/2Ye503).
515. Mikhaylov, I.A. (). Holographic optical elements to project television images on a large screen. TKTEA, no. 5, 1986, 37-38. (RZFZA, 87/2L738).
516. Nefed'yev, L.A. (). Dynamic echo holography in degenerate and multilevel systems. IANFA, no. 8, 1986, 1551-1558. (RZFZA, 87/1L758).
517. Platonov, Ye.M. (). Holographic system for the visualization of cross-sections of phase nonuniformities. ZPSBA, v. 46, no. 2, 1987, 295-301.
518. Polyanskiy, V.K.; Polyanskiy, P.V. (). Spectral characteristics of granular reflection holograms. Fotometriya i yeye metrologicheskoye obespecheniye. CVNTKFMO, 6th, 27-31 Oct 1986. Tezisy dokladov. Moskva, 1986, 258. (RZRAB, 87/2Ye498).
519. Shelekhov, N.S.; Sukhanov, V.I.; Solomatin, Yu.V.; Ashcheulov, Yu.V. (GOI). Investigation of the possibility of obtaining specimens of reoxane of optical quality. OPMPA, no. 1, 1987, 59-60.

520. Vlasov, N.G.; Zaborov, A.N. (). Recording of rainbow holograms of multicolored and achromatic images. Fotometriya i yeye metrologicheskoye obespecheniye. CVNTKFM0, 6th, 27-31 Oct 1986. Tezisy dokladov. Moskva, 1986, 261. (RZRAB, 87/2Ye501).
 521. Vorob'yev, S.P. (). Metrological approach to determining the quality of holograms. Fotometriya i yeye metrologicheskoye obespecheniye. CVNTKFM0, 6th, 27-31 Oct 1986. Tezisy dokladov. Moskva, 1986, 238. (RZRAB, 87/2Ye500).
 522. Zelenskaya, T.Ye. (TIASUR). Photogeneration of acoustic waves by a bounded holographic grating. IVUFA, no. 2, 1987, 111-112.
- F. LASER-INDUCED CHEMICAL REACTIONS
523. Alekseyev, A.B.; Pravilov, A.M. (NIIFL). Determination of absolute quantum yields of $I[(\sup{2})P(\sub{1/2})]$ atoms from their reaction with NOCl under photolysis of iodides. KVEKA, no. 2, 1987, 408-409.
 524. Beterov, I.M.; Fateyev, N.V. (). Collisional ionization of e-beam [and laser]-excited atoms. KHPLD, no. 13, 1987, 40-74.
 525. Bezuglov, N.N.; Borodin, V.M.; Klyucharev, A.N.; Skrebov, V.N.; Yanson, M.L. (). Chemical ionization and transfer processes in slow collisions of excited atoms. KHPLD, no. 13, 1987, 3-40.
 526. Botsman, A.V.; Marchenko, L.V. (). Photochemical transformation of calcium acrylate gelatin. UKZHA, no. 9, 1986, 952-954. (RZFZA, 87/1L767).
 527. Denisyuk, I.Yu. (). Pulsed electric conductivity measurement of the parameters of latent image centers [of photolysis products] in aluminum hydride. ZNPFA, no. 1, 1987, 62-65.
 528. Helmig, N.; Johansen, H. (). Laser-stimulated molecular dynamics (in German). Zentralinstitut fuer Isotopen- und Strahlenforschung der DDR. Mitteilungen, no. 82, 1983, 87-103. (RZFZA, 87/2L1171).
 529. Kapralova, G.A.; Trofimova, Ye.M.; Chaykin, A.M. (IKhF). Experimental investigation of the influence of laser radiation on an associative reaction of $BCl(\sub{3})$ with $N[CH(\sub{3})](\sub{3})$. KHFID, no. 1, 1987, 75-80.

530. Ketsle, G.A.; Kucherenko, M.G.; Muldakhmetov, Z.M. (). Evidence of the heavy atom effect in the annihilation of triplet excitations of halogenated fluorescein and anthracene. Tripletnyye vozvuzhdeniya v molekulyarnykh kristallakh. CRSSSPVT, Cherkassy, 18-20 Jun 1985. Trudy. FTINT. VINITI. Deposit, no. 6590-V, 1986, 101-112. (RZFZA, 87/1L396).
531. Kuz'menko, V.A. (). Single-photon isotopically selective dissociation of $\text{CF}(\text{sub}2)\text{Cl}(\text{sub}2)$ molecules in the radiation field of a pulsed CO_2 -laser. ZFKHA, no. 2, 1987, 475-479.
532. Kuz'min, V.A.; Levin, P.P.; Khudyakov, I.V. (IKhF). Kinetics of geminal recombination of aromatic radicals in liquid polymers. IASKA, no. 2, 1987, 437-438.
533. Levin, P.P.; Belyayev, A.B.; Kuz'min, V.A. (IKhF). Laser photolysis study on the triplet states of spatially hindered omicron-quinones. IASKA, no. 2, 1987, 448-451.
534. Malkin, Ya.N.; Ruziyev, Sh.; Pirogov, N.O.; Kuz'min, V.A. (IKhF). Role of the lower triplet state in photoreactions of aromatic amines. IASKA, no. 1, 1987, 62-67.
535. Marunkov, A.G.; Chekalin, N.V. (). Determining the degree of collisional ionization from excited levels of atoms in a flame. OPSPA, v. 61, no. 4, 1986, 735-739.
536. Nazaryan, A.O.; Plyukhin, V.G.; Smirnov, B.M. (). Intense slow processes in chemical physics. KHPLD, no. 13, 1987, 207-240.
537. Polevoy, A.V.; Matyuk, V.M.; Grigor'yeva, G.A.; Potapov, V.K. (NIFKhI). Formation of intermediate products under conditions of resonant stepwise photoionization of dibenzylketone and benzyl molecules. KHVKA, no. 1, 1987, 17-21.
538. Shilov, V.N.; Razilov, I.A.; Estrela-L'opis, V.R. (IKKh). Dipole phoresis of colloid particles near the interface of two media under total internal reflection of light from it. KOZHA, no. 1, 1987, 98-103.
539. Varakin, V.N.; Lozovskiy, A.D.; Panesh, A.M.; Simonov, A.P. (NIFKhI). Laser desorption study on adsorption kinetics in molecules. IANFA, no. 2, 1987, 367-371.

540. Yevseyev, A.V.; Puretskiy, A.A.; Tyakht, V.V. (ISAN). Multiphoton excitation of molecules under conditions of collisional relaxation. KHFID, no. 2, 1987, 195-203.

G. MEASUREMENT OF LASER PARAMETERS

541. Abramenko, V.A.; Blagodyrev, A.V.; Mironchuk, A.V. (). Spectrum analyzer of optical radiation. Fotometriya i yeye metrologicheskoye obespecheniye. CVNTKFMO, 6th, 27-31 Oct 1986. Tezisy dokladov. Moskva, 1986, 111. (RZRAB, 87/2Ye236).
542. Adzhamoglyan, P.O.; Khachatryan, R.A.; Sharanbeyan, K.M. (). Control unit of a step actuator for automated informational measuring systems for energy photometry [of pulsed laser radiation]. Fotometriya i yeye metrologicheskoye obespecheniye. CVNTKFMO, 6th, 27-31 Oct 1986. Tezisy dokladov. Moskva, 1986, 48. (RZMIB, 87/2.32.1275).
543. Aganov, A.M.; Tovmasyan, A.K. (). Identifying the pulse response of a path measuring instrument to reconstruct the shape of ultrashort light pulses. Fotometriya i yeye metrologicheskoye obespecheniye. CVNTKFMO, 6th, 27-31 Oct 1986. Tezisy dokladov. Moskva, 1986, 53. (RZMIB, 87/2.32.1169).
544. Alentsev, B.M.; Kaslin, V.M.; Kirevina, G.A.; Terent'yev, V.P.; Yakushev, O.F. (). Using a linear charge-coupled device to study the spectral characteristics of laser radiation. Fotometriya i yeye metrologicheskoye obespecheniye. CVNTKFMO, 6th, 27-31 Oct 1986. Tezisy dokladov. Moskva, 1986, 68. (RZRAB, 87/2Ye235).
545. Andreyev, V.I.; Pevzner, Ya.B.; Shternin, L.A.; Yakovlev, V.A. (). Wide-aperture transducer to measure industrial laser radiation. Fotometriya i yeye metrologicheskoye obespecheniye. CVNTKFMO, 6th, 27-31 Oct 1986. Tezisy dokladov. Moskva, 1986, 37. (RZRAB, 87/2Ye350).
546. Antonova, K.T.; Granbcharov, K.; Spasov, L.; Zhizhin, G.N.; Yakovlev, V.A. (). Highly sensitive radiometer with a quartz resonator (in English). CRABA, no. 6, 1986, 35-37. (RZRAB, 87/1Ye212).
547. Balakhnin, A.Ye.; Bukovskiy, B.L.; Bobrik, V.I.; Ivanshechkina, M.A.; Mikhaylova, T.P.; Sultanov, M.B.; Tomashevskiy, Yu.F. (). Operating standard of a wavelength unit for pulsed lasers. IZTEA, no. 1, 1987, 17-18.

548. Bekshayev, A.Ya.; Grimblatov, V.M.; Okunishnikov, O.N.; Starov, V.S. (). Measuring the energy center coordinates of laser beams with an irregular intensity distribution. Fotometriya i yeye metrologicheskoye obespecheniye. CVNTKFMO, 6th, 27-31 Oct 1986. Tezisy dokladov. Moskva, 1986, 63. (RZRAB, 87/2Ye237).
549. Benditskiy, A.A.; Karabutov, A.A.; Platonenko, V.T.; Przhrevskiy, S.S.; Chupryna, V.A.; Khatyrev, N.P.; Yakovlev, V.A. (). Measuring the energy of laser radiation by excitation of acoustic waves in a solid. Fotometriya i yeye metrologicheskoye obespecheniye. CVNTKFMO, 6th, 27-31 Oct 1986. Tezisy dokladov. Moskva, 1986, 14. (RZMIB, 87/1.32.1046).
550. Blagodatova, N.B.; Zhirnov, A.V.; Levi, A.M.; Sidorenko, S.L. (). Study on the spatial characteristics of transverse cross-sections of solid-state laser beams. Fotometriya i yeye metrologicheskoye obespecheniye. CVNTKFMO, 6th, 27-31 Oct 1986. Tezisy dokladov. Moskva, 1986, 72. (RZRAB, 87/2Ye240).
551. Bobrik, V.I.; Zhmud', A.A. (SNIIM). Stabilization of the emission wavelength of injection lasers without external optical devices. KVEKA, no. 2, 1987, 406-408.
552. Bondarev, B.V.; Seleznev, S.N.; Sorokin, V.A. (). Frequency selection and tuning in an argon laser by a Michelson interferometer. AVMEB, no. 1, 1987, 56-59.
553. Butkevich, V.I. (). Complex system to stabilize laser radiation power. Fotometriya i yeye metrologicheskoye obespecheniye. CVNTKFMO, 6th, 27-31 Oct 1986. Tezisy dokladov. Moskva, 1986, 23. (RZRAB, 87/2Ye185).
554. Demkin, V.N.; Privalov, V.Ye. (). Methods for power stabilization in c-w gas-discharge lasers. TsNIIE. Obzory po elektronnoy tekhnike, seriya 11, no. 3(1179), 1986, 24 p. (Tochnyye izmereniya i kvantovaya elektronika, no. 39, VNIIM, 1987, 631).
555. Fetisov, S.P.; Khromov, A.V.; Yakovlev, V.A. (). Errors in measuring the relative power density distribution of laser radiation. Fotometriya i yeye metrologicheskoye obespecheniye. CVNTKFMO, 6th, 27-31 Oct 1986. Tezisy dokladov. Moskva, 1986, 75. (RZRAB, 87/2Ye238).

556. Fetisov, S.P.; Yakovlev, V.A. (). Systematic approach to developing means to measure the radiation parameters of industrial lasers. Fotometriya i yeye metrologicheskoye obespecheniye. CVNTKFM0, 6th, 27-31 Oct 1986. Tezisy dokladov. Moskva, 1986, 36. (RZRAB, 87/2Ye242).
557. Generalov, V.I.; Kalinin, Yu.A.; Kurchanov, A.F.; Russov, V.M.; Smorodin, A.Yu.; Teryayev, Yu.N.; Tolbina, L.I. (). Sample means to measure the energy of transmitted laser radiation. Fotometriya i yeye metrologicheskoye obespecheniye. CVNTKFM0, 6th, 27-31 Oct 1986. Tezisy dokladov. Moskva, 1986, 38. (RZRAB, 87/2Ye245).
558. Glazov, A.I.; Korshikov, V.B.; Kotyuk, A.F.; Tikhomirov, S.V.; Tyutyunnik, V.G. (). Improved measuring accuracy of photoelectric pulsed photometers of laser radiation. Fotometriya i yeye metrologicheskoye obespecheniye. CVNTKFM0, 6th, 27-31 Oct 1986. Tezisy dokladov. Moskva, 1986, 9. (RZRAB, 87/2Ye267).
559. Gritsiv, V.V.; Guts, V.V.; Malimon, I.V.; Solonchuk, I.V.; Ursulyak, V.D. (). Spectral polarization measurements of wideband light sources. Fotometriya i yeye metrologicheskoye obespecheniye. CVNTKFM0, 6th, 27-31 Oct 1986. Tezisy dokladov. Moskva, 1986, 245. (RZRAB, 87/2Ye252).
560. Ignatovich, T.N.; Sachkov, V.I. (). Standardization of general technical requirements for means to measure the parameters of laser radiation. Amendment no. 1 to State Standard GOST 24469-80. Fotometriya i yeye metrologicheskoye obespecheniye. CVNTKFM0, 6th, 27-31 Oct 1986. Tezisy dokladov. Moskva, 1986, 4. (RZRAB, 87/2Ye233).
561. Ioffe, L.A.; Kolunov, A.V.; Negadaylov, A.A.; Shustakov, V.Yu. (). Calculating the thermal effect of detectors on each other while determining the energy distribution in transverse cross sections of pulsed laser beams. Fotometriya i yeye metrologicheskoye obespecheniye. CVNTKFM0, 6th, 27-31 Oct 1986. Tezisy dokladov. Moskva, 1986, 73. (RZRAB, 87/2Ye239).

562. Ioffe, L.A.; Kolunov, A.V.; Negadaylov, A.A.; Podil'chuk, N.D.; Shustakov, V.Yu. (). Determining the interval between verifications of multielement calorimetric transducers to measure the characteristics of laser radiation. Fotometriya i yeye metrologicheskoye obespecheniye. CVNTKFMO, 6th, 27-31 Oct 1986. Tezisy dokladov. Moskva, 1986, 74. (RZRAB, 87/2Ye241).
563. Kalinin, Yu.A.; Tolbina, L.I.; Obukhov, A.S. (). Normalization of the parameters and characteristics of means to measure the energy parameters of transmitted laser radiation. Fotometriya i yeye metrologicheskoye obespecheniye. CVNTKFMO, 6th, 27-31 Oct 1986. Tezisy dokladov. Moskva, 1986, 11. (RZRAB, 87/2Ye230).
564. Kalinovskiy, V.L.; Nikitin, Ye.V. (). Optoelectronic device to measure low levels of c-w power in the 0.3-25 μm range. Fotometriya i yeye metrologicheskoye obespecheniye. CVNTKFMO, 6th, 27-31 Oct 1986. Tezisy dokladov. Moskva, 1986, 17. (RZMIB, 87/2.32.1371).
565. Kell, K.Yu.; Soskind, Ya. (). Calibration of optical systems to measure the divergence of laser radiation. ETFMB, no. 3, 1986, 258-262. (RZFZA, 87/1L1028).
566. Kovalenko, S.A.; Semin, S.P. (VNIFTRI). Condensation of a multimode broadband laser spectrum. KVEKA, no. 2, 1987, 401-403.
567. Kozachenko, M.L.; Palivoda, A.P.; Khatyrev, N.P.; Yudenich, I.S. (). Complex of equipment to measure the energy of pulsed laser radiation. Fotometriya i yeye metrologicheskoye obespecheniye. CVNTKFMO, 6th, 27-31 Oct 1986. Tezisy dokladov. Moskva, 1986, 12. (RZRAB, 87/2Ye250).
568. Kozlov, S.A.; Logachev, V.A. (). Theoretical analysis of the rate of change of the discrimination characteristics of a two-contour automatic frequency control system in a quantum frequency standard. IVYRA, no. 7, 1986, 865-867.
569. Kumeysya, N.A.; Yevmenchikov, N.L. (). Using differentiating circuits to improve the accuracy in measuring low values of gain in laser active media. Fizicheskaya gazodinamika: eksperimental'noye modelirovaniye i diagnostika. ITMO. Minsk, 1985, 156-162. (Tochnyye izmereniya i kvantovaya elektronika, no. 39, VNIIM, 1987, 194).

570. Liberman, A.A.; Rapoport, Ye.S. (). Device to measure the spatial indexes of scattering and energy characteristics of laser radiation. Fotometriya i yeye metrologicheskoye obespecheniye. CVNTKFMO, 6th, 27-31 Oct 1986. Tezisy dokladov. Moskva, 1986, 42. (RZRAB, 87/2Ye246).
571. Lisitsyn, V.S.; Nadezhkin, Yu.M. (). Topological description of measuring means to determine the coefficients of reflection and loss in laser optical elements. Fotometriya i yeye metrologicheskoye obespecheniye. CVNTKFMO, 6th, 27-31 Oct 1986. Tezisy dokladov. Moskva, 1986, 26. (RZRAB, 87/2Ye232).
572. Mironov, A.V. (). Calculation of a discrimination-characteristic contour and frequency shift for a saturated-absorption stabilized laser. OPSPA, vol. 62, no. 2, 1987, 423-429.
573. Nozdrin, V.V. (MEI). Thermomagnetic recorders of the structure of pulsed laser radiation. MEI. Dissertation, 1986, 18 p. (Tochnyye izmereniya i kvantovaya elektronika, no. 39, VNIIM, 1987, 283).
574. Rosenfeld, A.; Mory, S.; Koenig, R. (). Simple method based on the optogalvanic effect for absolute calibration of the wavelength of tunable lasers in the visible and near IR (in German). EXPPA, no. 3, 1986, 183-190. (RZFZA, 87/2L1019).
575. Rubinshteyn, V.M. (). Structure of a problem-oriented complex of algorithms to measure the spatial-energy characteristics of laser radiation. Fotometriya i yeye metrologicheskoye obespecheniye. CVNTKFMO, 6th, 27-31 Oct 1986. Tezisy dokladov. Moskva, 1986, 65. (RZMIB, 87/2.32.1217).
576. Shpak, I.V.; Klochko, V.M.; Kostolomov, A.F.; Kirillov, V.A.; Tsvetkov, V.Yu. (). Study on the radiation intensity distribution in transverse cross-sections of laser beams. Fotometriya i yeye metrologicheskoye obespecheniye. CVNTKFMO, 6th, 27-31 Oct 1986. Tezisy dokladov. Moskva, 1986, 62. (RZRAB, 87/2Ye231).
577. Smirnov, Ye.A.; Ordin, A.B. (). Calculating the dynamic resistance of laser spark gaps. Vakuumnaya i plazmennaya elektronika. Ryazan', 1986, 21-25. (RZFZA, 87/2L1018).

578. Stysin, V.Ye.; Surkov, O.L.; Teslenko, L.Yu.; Tikhomirov, S.V. (). Study on sluggishness in germanium photodiodes. Fotometriya i yeye metrologicheskoye obespecheniye. CVNTKFMO, 6th, 27-31 Oct 1986. Tezisy dokladov. Moskva, 1986, 15. (RZRAB, 87/2Ye243).
579. Timoshenko, V.N.; Kokodiy, N.G.; Yefimov, V.F.; Krisyuk, V.Ya. (). Graded calorimeter to measure the energy parameters of optical radiation. IZTEA, no. 9, 1986, 23-24.
580. Ulanovskiy, M.V. (). Using optical fiber collectors to construct means to measure the spatial characteristics of laser radiation. Fotometriya i yeye metrologicheskoye obespecheniye. CVNTKFMO, 6th, 27-31 Oct 1986. Tezisy dokladov. Moskva, 1986, 67. (RZRAB, 87/2Ye234).
581. Ulanovskiy, M.V. (). Accuracy parameters of matrix means to measure the spatial-energy characteristics of pulsed laser radiation. Fotometriya i yeye metrologicheskoye obespecheniye. CVNTKFMO, 6th, 27-31 Oct 1986. Tezisy dokladov. Moskva, 1986, 16. (RZRAB, 87/2Ye244).
582. Ulanovskiy, M.V. (). Certification of matrix means to measure the spatial-energy characteristics of pulsed laser radiation. Fotometriya i yeye metrologicheskoye obespecheniye. CVNTKFMO, 6th, 27-31 Oct 1986. Tezisy dokladov. Moskva, 1986, 66. (RZRAB, 87/2Ye281).
583. Vadkovskaya, T.N.; Drozhbin, Yu.A.; Lobachev, V.A.; Murina, T.M.; Prokhorov, A.M.; Trofimenko, V.V.; Yarova, A.G. (). Photographic recording of pulsed laser radiation at 3 μ m. Fotometriya i yeye metrologicheskoye obespecheniye. CVNTKFMO, 6th, 27-31 Oct 1986. Tezisy dokladov. Moskva, 1986, 217. (RZRAB, 87/2Ye279).
584. Yermakov, B.A.; Lukin, A.V. (). Effect of temperature on the performance of solid-state lasers with passive shutters. KVEKA, no. 2, 1987, 369-374.

H. LASER MEASUREMENT APPLICATIONS

1. Direct Measurement by Laser

585. Akopyan, R.S.; Alaverdyan, R.B.; Chilingaryan, Yu.S. (). Optical anisotropy of cholesteric liquid crystals with homeotropic orientation at the walls. IAAFA, no. 4, 1986, 228-230. (RZFZA, 87/1L163).
586. Alaverdyan, R.B.; Arakelyan, S.M.; Karayan, A.S.; Chilingaryan, Yu.S. (YeGU). Observation of time instabilities during the dynamic self-diffraction of light in an anisotropic non-homogeneous medium. PZTFD, no. 2, 1987, 119-123.
587. Alekseyev, E.I.; Bazarov, Ye.N.; Izrayelyan, V.G.; Kukhta, A.V. (IRE). Effect of radiation statistics on the sensitivity of a fiber ring interferometer. KVEKA, no. 1, 1987, 192-194.
588. Alekseyev, V.V.; Okhotin, S.V.; Kharlamova, Ye.Yu. (MEI). Studying the density of multicomponent mixtures of nonpolar substances by optical methods. MEI. Nauchnyye trudy, no. 72, 1985, 145-149. (RZFZA, 87/1L162).
589. Andreyev, A.M.; Ginzburg, V.M.; Presnyakov, Yu.P.; Ramishvili, N.M. (VNII OFI). Use of a self-reproduction phenomenon for the measurement of the shape of a distributed surface of a liquid-gas interface. AKZHA, no. 1, 1987, 93-96.
590. Andreyev, S.V. (ISAN). Measurement of ultralow intensities of the saturated vapor of atoms. ZTEFA, no. 2, 1987, 341-344.
591. Angel'skiy, O.V.; Magun, I.I.; Maksimyak, P.P. (). Optical correlation measurements of surface roughness parameters. Fotometriya i yeye metrologicheskoye obespecheniye. CVNTK FMO, 6th, 27-31 Oct 1986. Tezisy dokladov. Moskva, 1986, 231. (RZRAB, 87/2Ye284).
592. Arnautov, G.P. (). Measurement of acceleration of free fall with regard to the non-uniformity of its gradient. AVMEB, no. 1, 1987, 51-55.
593. Artemenko, S.B.; Pyzin, G.P. (). Variations of holographic shift interferometers to measure diffusely reflecting objects. Fotometriya i yeye metrologicheskoye obespecheniye. CVNTK FMO, 6th, 27-31 Oct 1986. Tezisy dokladov. Moskva, 1986, 260. (RZRAB, 87/2Ye508).

594. Babukova, M.V.; Glebov, L.B.; Morozova, I.S.; Nikonorov, N.V.; Petrovskiy, G.T. (). Effect of substrate thickness on the formation of the index of refraction of glass during low-temperature ion exchange. FKSTD, no. 1, 1987, 60-66.
595. Barykin, S.V.; Gromova, N.B.; Dmitriyev, V.P. (GOI). Improving the accuracy in calculations of stressed plane circular protective glass. OPMPA, no. 1, 1987, 18-20.
596. Batyrbekov, G.A.; Batyrbekov, E.G.; Bekmurzayeva, Z.B.; Soroka, A.M.; Khasenov, M.U. (). Measurement of the charge-exchange rate constant for $Xe^{(sup+)(sub2)}$ ions with mercury atoms. OPSPA, vol. 62, no. 1, 1987, 229-230.
597. Baudys, A.; Klaboch, L. (). Mirror-lens system [used in laser Doppler anemometers] for simultaneous illumination and observation of an object. Author's certificate Czechoslovakia, no. 223391, 15 Mar 1986. (RZMIB, 87/1.32.1169).
598. Belogorskiy, V.V.; Pecherskiy, O.P.; Chernobrovin, V.I.; Likhachev, V.A.; Morozov, V.A.; Meshcheryakov, Yu.I. (). Breaking-away processes using an anode of a heavy-current pulsed electron accelerator. FKOMA, no. 1, 1987, 42-44.
599. Belotserkovskiy, E.N. (GOI). Multimode irregular-surface lightguides and sensors of physical and mechanical quantities based on them. OPMPA, no. 2, 1987, 31-33.
600. Belyayeva, O.A.; Vaynshteyn, S.N.; Zhilyayev, Yu.V.; Levinshteyn, M.Ye.; Chelnokov, V.Ye. (FTI). Subnanosecond switching of gallium arsenide thyristors. PZTFD, no. 15, 1986, 925-928.
601. Berezhnoy, A.Ye.; Golub, Ya.S.; Kotyuk, A.F.; Stysin, V.Ye.; Tikhomirov, S.V.; Ustinnikov, V.N. (). Automation of non-path control of the spatial-energy characteristics of pulsed geodesic rangfinders. Fotometriya i yeye metrologicheskoye obespecheniye. CVNTKFMO, 6th, 27-31 Oct 1986. Tezisy dokladov. Moskva, 1986, 285. (RZRAB, 87/2Ye285).
602. Borisovskiy, S.P.; Polyakov, S.Yu.; Khanov, V.A.; et al. (). Frequency-stabilized lasers for interference measurements. TsNIIE. Obzory po elektronnoy tekhnike, seriya 11, no. 4(1182), 1986, 52 p. (Tochnyye izmereniya i kvantovaya elektronika, no. 39, VNIIM, 1987, 623).

603. Borovtsov, P.V.; Kulev, G.G. (). Controlling the output parameters of piezoelements in quartz resonators by holographic interferometry. Fotometriya i yeye metrologicheskoye obespecheniye. CVNTKFMO, 6th, 27-31 Oct 1986. Tezisy dokladov. Moskva, 1986, 265. (RZRAB, 87/2Ye510).
604. Braginskiy, V.B.; Grishchuk, L.P. (). Gravitational wave astronomy [with ground-based laser interferometric antennas]. UFNAA, v. 151, no. 1, 177-178.
605. Budkevich, B.A.; Ges', I.A.; Malevich, V.L.; Pilipovich, V.A.; Romanov, I.M.; Romanova, L.I. (). Light modulation characteristics of reflectional selective electrochromic elements based on amorphous semiconductor films with different types of conductivity. VBSFA, no. 4, 1986, 47-53. (RZFZA, 87/1L711).
606. Burov, A.A.; Kordumov, A.I.; Makarkin, A.I.; Rodichenko, G.V. (). Optical pulse generators as measuring instruments based on e-beam-pumped semiconductor lasers. Fotometriya i yeye metrologicheskoye obespecheniye. CVNTKFMO, 6th, 27-31 Oct 1986. Tezisy dokladov. Moskva, 1986, 24. (RZRAB, 87/2Ye162).
607. Butenko, A.D.; Zaychenko, O.V.; Zorina, V.B.; Tarshinov, I.V. (). Using double-exposure holographic interferometry on photothermoplastic carriers for optical measurements. Fotometriya i yeye metrologicheskoye obespecheniye. CVNTKFMO, 6th, 27-31 Oct 1986. Tezisy dokladov. Moskva, 1986, 262. (RZRAB, 87/2Ye513).
608. Buzhinskiy, I.M.; Zhukovets, Zh.G. (). Laser dilatometer study on heat expansion in glass ceramics in the minus 60 to plus 80 degrees C temperature range. MTRLB, no. 9, 1986, 38-42. (RZFZA, 87/2A85).
609. Chichinin, A.I.; Chasovnikov, S.A.; Krasnoperov, L.N. (IKhKG). Investigation of relaxation and reactions of $\text{Cl}[(\text{sup}2)\text{P}(\text{sub}1/2)]$ and $\text{Cl}[(\text{sup}2)\text{P}(\text{sub}3/2)]$ atoms with ICl molecules by a laser magnetic resonance method with time resolution. KHFID, no. 2, 1987, 281-282.
610. Dan'ko, V.P.; Podanchuk, D.V. (). Magneto optic signal spectrum analyzer with holographic correction of aberrations. FOOSD, no. 17, 1986, 122-124. (RZFZA, 87/2L735).

611. Dobrynin, B.M.; Maslennikov, V.G.; Sakharov, V.A. (FTI). Process of the establishment of a planar supersonic jet flow under various physical properties, discharging and inundating a jet of gases. ZTEFA, no. 1, 1987, 118-124.
612. Dubnishchev, Yu.N.; Meledin, V.G.; Pavlov, V.A. (). Measurement of speed by a Doppler speckle-interferometry method. AVMEB, no. 1, 1987, 44-51.
613. Evenigorodskiy, E.G.; Kaminskiy, Yu.D.; Shelementseva, V.K. (). Evaluating the metrological characteristics of a two-point laser Doppler flowmeter. Perspektivy razvitiya metodov i sredstv izmereniya raskhoda. NIItteplopribor. Moskva, 1985, 48-60. (Tochnyye izmereniya i kvantovaya elektronika, no. 39, VNIIM, 1987, 189).
614. Foerster, G.; Goepel, K.; Haertig, Th.; Hofmann, D. (). Device for an optical measuring information system. Patent GDR, no. 227226, 11 Sep 1985. (RZMIB, 87/1.32.1208).
615. Foerster, G.; Goepel, K.; Haertig, Th.; Hofmann, D. (). Optical measuring information system. Patent GDR, no. 227228, 11 Sep 1985. (RZMIB, 87/1.32.1209).
616. Galkin, S.L.; Kozhevnikov, N.M. (). Polarization characteristics of an anisotropic ring fiberoptic interferometer. OPSPA, vol. 62, no. 1, 1987, 170-175.
617. Gayda, L.S.; Platonov, Ye.M.; Pul'kin, S.A.; Spornik, N.M. (GrodGU). Method for quantitative study of spatial inhomogeneities. OTIZD, no. 28, 1986, 1247726. (RZFZA, 87/1L757).
618. Goepel, K.; Michailoff, M.; Haertig, Th.; Hofmann, D. (). Device for fiberoptic measurement of physical sizes. Patent GDR, no. 227227, 11 Sep 1985. (RZMIB, 87/1.32.1176).
619. Gunyakov, V.A.; Korets, A.Ya.; Shabanov, V.F. (IFSOAN). Optical methods to measure the angle of inclination of molecules in nematic liquid crystal layers. IFSOAN. Preprint, no. 397F, 1986, 14 p. (RZFZA, 87/1L161).
620. Gusev, V.G.; Poyzner, E.N. (SFTI). Measurement of the radius of curvature of spherical mirrors by a holographic interferometry method. IVUBA, no. 2, 1987, 85-89.

621. Ignatov, S.A.; Teleshevskiy, V.I. (). Dynamics of restoration of measurement information in laser recursive acoustooptic interference systems. Fotometriya i yeye metrologicheskoye obespecheniye. CVNTKFMO, 6th, 27-31 Oct 1986. Tezisy dokladov. Moskva, 1986, 249. (RZRAB, 87/2Ye268).
622. Jahn, J.U.; Haubenreisser, W.; Willsch, R. (). Fiberoptic refractometer sensor and its application (in German). MSKGA, no. 9, 1986, 408-410, 430, 431. (RZMIB, 87/1.32.1061).
623. Kaminskiy, Yu.D.; Martynova, V.I.; Proskurnev, S.Yu.; Shonin, L.N. (). Study on a two-point laser Doppler flowmeter. Perspektivy razvitiya metodov i sredstv izmereniya raskhoda. NIITEPLOPRIBOR. Moskva, 1985, 60-68. (Tochnyye izmereniya i kvantovaya elektronika, no. 39, VNIIM, 1987, 180).
624. Karapetyan, G.O.; Korolev, Yu.G.; Maksimov, L.V.; Nemilov, S.V. (). Physical chemical characteristics of niobate glasses possessing electrooptical properties. FKSTD, no. 5, 1986, 598-601.
625. Kazakova, L.P.; Kolomiyets, B.T.; Lebedev, E.A.; Tauraytene, S.A. (FTI). Characteristics of dispersion transfer in glass-like $\text{As}(\text{sub}2)\text{Se}(\text{sub}3)$. FTPPA, no. 2, 1987, 274-278.
626. Khramtsovskiy, I.A.; Pshenitsyn, V.I.; Mishin, A.V.; Tolmachev, V.A.; Kholdarov, N.Kh. (). Ellipsometry study on surface layers of lead silicate glass. FKSTD, no. 1, 1987, 104-111.
627. Klimenko, I.S.; Kuznetsova, T.V.; Malov, A.N. (MFTI). Obtaining high-contrast speckle interferograms of longitudinal displacements while recording a speckle field in a Fourier plane. ZTEFA, no. 9, 1986, 1744-1748.
628. Klimenko, I.S.; Ryabukho, V.P.; Feduleyev, B.V. (MFTI). Luminosity oscillations and localization of interference bands in speckle interferometry. ZTEFA, no. 9, 1986, 1749-1756.
629. Kolomeyets, S.D.; Krivosheylkov, A.Yu.; Smirnov, V.O.; Tymchik, G.S. (GOI). Device for coupling a laser to to a single-mode lightguide. OPMPA, no. 1, 1987, 32-33.

630. Komissarova, I.I.; Ostrovskaya, G.V.; Filippov, V.N.; Shedova, Ye.N. (FTI). Increase in the sensitivity of holographic interferometry due to multiple passage of reconstructed radiation through a hologram. ZTEFA, no. 2, 1987, 377-380.
631. Kompaneyts, A.N.; Teleshevskiy, V.I. (). Laser heterodyne method for multiparameter measurements based on space-time matching of diffraction spectra of lightwaves in ultrasound. Fotometriya i yeye metrologicheskoye obespecheniye. CVNTKFMO, 6th, 27-31 Oct 1986. Tezisy dokladov. Moskva, 1986, 230. (RZMIB, 87/2.32.1302).
632. Korneyev, N.A.; Pogrebnyak, B.N. (VNIIG). Method for automatic interpretation of holographic interferograms. VNIIG. Izvestiya, no. 190, 1986, 80-83. (RZMIB, 87/2.32.1309).
633. Kosoburd, T.P.; Krasnov, V.A.; Sorokin, Yu.M. (GGU). The TIBR pulsed shadow detector for diagnostics of transient phase objects. PRTEA, no. 1, 1987, 185-186.
634. Kotov, I.R.; Sitnik, D.N.; Khopov, V.V. (). Using two-frequency radiation in holographic interferometry and speckle photography. Fotometriya i yeye metrologicheskoye obespecheniye. CVNTKFMO, 6th, 27-31 Oct 1986. Tezisy dokladov. Moskva, 1986, 255. (RZRAB, 87/2Ye522).
635. Kozintsev, M.S.; Prokhorov, A.V. (). Measuring the spectral coefficients of diffuse reflection by means of a laser reflectometer with a mirror cylindrical concentrating system. Fotometriya i yeye metrologicheskoye obespecheniye. CVNTKFMO, 6th, 27-31 Oct 1986. Tezisy dokladov. Moskva, 1986, 91. (RZRAB, 87/2Ye251).
636. Kronberg, Ye.R.; Serov, Yu.L.; Yavor, I.P. (FTI). Flow around a sphere in a chemically reactive medium. ZTEFA, no. 1, 1987, 202-205.
637. Kulik, M.; Zuk, J. (). Optical constants determination of ion implanted GaAs layers by ellipsometry (in English). ATPLB, v. A69, no. 6, 1986, 1141-1144. (RZFZA, 87/1L42).
638. Lazarev, L.P. (MVTU). Optoelectronic instruments. MVTU. Trudy, no. 466, 1986, 1-80. (RZFZA, 87/2L533).

639. Lazarev, L.P.; Mirovitskaya, S.D. (). Optical systems for instruments to measure the geometric characteristics of optical fibers and capillaries. *Izmereniya, kontrol', avtomatizatsiya*, no. 3/59, Moskva, 1986, 18-30. (RZFZA, 87/2L693).
640. Lisitsa, M.P.; Kulish, N.R.; Malysh, N.I.; Bulakh, B.M. (IPANUK). Photoconduction and absorption saturation in CdSe. *FTPPA*, no. 2, 1987, 353-355.
641. Livshits, V.Ya.; Kozyrev, V.K.; Asotskaya, E.A. (LTITSBP). State of the near-surface layer of glass during ion exchange from data on changes of the index of refraction. *FKSTD*, no. 1, 1987, 45-49.
642. Lyubinskaya, R.I.; Mardezhov, A.S.; Khasanov, T.; Shvets, V.A. (IFPSOAN). Algorithms and programs to analyze the results of ellipsometric measurements. Part 1. Single layer structures. *IFPSOAN*. Preprint, no. 1, 1986, 39 p. (RZFZA, 87/1L25).
643. Michailoff, M.; Haertig, Th.; Hofmann, D.; Martens, F. (). Optoelectronic [fiberoptic] measuring information system. Patent GDR, no. 227233, 11 Sep 1985. (RZMIB, 87/1.32.1207).
644. Mishin, A.V.; Pshenitsyn, V.I.; Kholdarov, N.Kh.; Banshchikov, A.G.; Savinova, G.V. (). Optical and concentration characteristics of surface layers of sodium borosilicate glass which contains terbium oxide. *FKSTD*, no. 1, 1987, 137-140.
645. Mitev, V.M.; Grigorov, I.V. (Bulgaria). (). Investigation of the effect of a photoelectric multiplier in a photon counting process. *PRTEA*, no. 1, 1987, 172-174.
646. Muranova, G.A.; Perveyev, A.F. (GOI). Obtaining thin-film waveguides by neutral ion-beam sputtering of a target [with losses measured by He-Ne laser]. *OPMPA*, no. 1, 1987, 20-22.
647. Nesmelov, V.V.; Isakov, G.N.; Zadorina, Ye.N.; Vishnevskiy, G.Ye. (NIIPMM; MAI). New data on the regularities of the thermal decomposition of polymers during convective heat and mass exchange. *DANKA*, vol. 292, no. 5, 1987, 1123-1126.

648. Netreba, P.I.; Tobolkin, A.S. (). Using laser interferometry to measure the speed of convective flows in a radio-frequency discharge. Fotometriya i yeye metrologicheskoye obespecheniye. CVNTKFM0, 6th, 27-31 Oct 1986. Tezisy dokladov. Moskva, 1986, 266. (RZRAB, 87/2Ye264).
649. Osipov, Yu.V. (). Laser interference resolution meters. Fotometriya i yeye metrologicheskoye obespecheniye. CVNTKFM0, 6th, 27-31 Oct 1986. Tezisy dokladov. Moskva, 1986, 222. (RZMIB, 87/2.32.1320).
650. Petrovskiy, G.T.; Pshenitsyn, V.I.; Antonov, V.A.; Vasil'yeva, L.K.; Velitskaya, Ye.L.; Yagovkin, S.V. (). Ellipsometric measurement of the roughness parameters of metal mirrors. DANKA, v. 290, no. 2, 1986, 317-321.
651. Petru, F.; Vesela, Z. (). Optical system of a detecting unit in a laser interferometer. Author's certificate Czechoslovakia, no. 231247, 15 Jun 1986. (RZMIB, 87/2.32.1306).
652. Plyuta, L.M. (). Estimating the errors in holographic measurements. Fotometriya i yeye metrologicheskoye obespecheniye. CVNTKFM0, 6th, 27-31 Oct 1986. Tezisy dokladov. Moskva, 1986, 237. (RZRAB, 87/2Ye507).
653. Popa, O.A.; Slepoy, B.Kh. (). Effect of the characteristics of an optoelectronic system of laser scanning microscopes on the spatial frequency filtering of images. IVUBA, no. 10, 1986, 85-89.
654. Radak, B.B.; Miljanic, S.S. (). Gas cell for simultaneous laser photoacoustic/thermal lens detection (in English). Journal of the Serbian Chemical Society, no. 1, 1986, 37-44. (RZFZA, 87/1L646).
655. Razumovskiy, V.N. (LIAP). Space-time analysis of the low-frequency component of the optical signal from a laser scanning viewing system. IVUBA, no. 2, 1987, 79-84.
656. Ryabov, A.S.; Mavrin, V.N.; Mazur, A.V.; Morshnev, S.K.; Frantesson, A.V. (IRE). Fiberoptic thermometer. PRTEA, no. 1, 1987, 215-218.

657. Semidetnov, N.V. (). Using an optical method to study the spatial structure of single- and multiphase flows. Fizika i tekhnika reaktorov. Materialy seminarov po primeneniyu yadernykh reaktorov v fizicheskikh issledovaniyakh, 1983-1984. Leningrad, 1986, 185-197. (RZFZA, 87/1V753).
658. Semidetnov, N.V.; Yuras, S.F. (). Laser Doppler transducer and its realization. Fizika i tekhnika reaktorov. Materialy seminarov po primeneniyu yadernykh reaktorov v fizicheskikh issledovaniyakh, 1983-1984. Leningrad, 1986, 177-184. (RZFZA, 87/1V754).
659. Stotskiy, A.A.; Pinchuk, G.A.; Sinyavskiy, V.I. (). Radioholographic adjustment of the RATAN-600 radiotelescope and prospects for its development. Sovremennyye konstruktivnyye resheniya radioteleskopov. Riga, 1986, 174-178. (RZFZA, 87/1Zh355).
660. Surzhikov, V.P.; Matlis, S.B.; Yakovlev, V.Yu. (ToPI). Kinetics of crack propagation during the irradiation of a KCl crystal by a nanosecond electron beam [measured by laser]. FTVTA, no. 1, 1987, 64-67.
661. Tokunov, Yu.M.; Zhilin, V.G.; Lyulyukin, V.I.; Mostinskiy, I.L.; Putin, Yu.A.; Sokol'skiy, A.G. (IVTAN). Using laser diagnostics to study the introduction of a dry aftercharge. TVYTA, no. 1, 1987, 175-178.
662. Vdovin, V.G.; Pustoshkin, A.A. (). Using holographic interferometry to determine heat losses in gas-discharge lamps. Fotometriya i yeye metrologicheskoye obespecheniye. CVNTKFMO, 6th, 27-31 Oct 1986. Tezisy dokladov. Moskva, 1986, 264. (RZRAB, 87/2Ye515).
663. Velikotnyy, M.A. (LITMO). Industrial viewing systems. Current status, problems and prospects. IVUBA, no. 10, 1986, 75-85.
664. Vernik, S.M.; Gladkov, Yu.P.; Kuznetsov, A.M.; Kravtsov, V.Ye.; Luzanov, V.B.; Frolova, N.G. (). Development and certification of a generator of paired optical pulses to verify optical reflectometers. Fotometriya i yeye metrologicheskoye obespecheniye. CVNTKFMO, 6th, 27-31 Oct 1986. Tezisy dokladov. Moskva, 1986, 57. (RZRAB, 87/2Ye266).

665. Viktorov, Ye.A.; Galaktionova, N.M.; Mak, A.A.; Orlov, O.A.; Tkachenko, Ye.V.; Ustyugov, V.I. (). High-sensitivity recording of weak reflected or scattered radiation by intracavity coherent detection with a YAG-Nd laser. OPSPA, vol. 62, no. 2, 1987, 430-436.
666. Vcrob'yeva, L.P.; Dagman, E.Ye.; Lyubinskaya, R.I.; Mardezhov, A.S.; Semenenko, A.I.; Shvets, V.A. (IFPSOAN). Algorithms and programs to analyze the results of ellipsometric measurements. Part 2. Multilayer structures. IFPSOAN. Preprint, no. 2, 1986, 36 p. (RZFZA, 87/1L26).
667. Will, P.; Totzauer, W.; Michel, B. (). Generalized J-integral of fracture mechanics from holographic data (in English). PSSAB, v. A95, no. 2, 1986, K113-K116. (RZFZA, 87/2L741).
668. Yeliseyev, A.B.; Korostelev, B.A.; Zagidullin, R.Sh.; Krivov, B.I. (MVTU). Fabry-Perot scanning interferometer. OTIZD, no. 29, 1986, 1249344. (RZFZA, 87/1L619).
669. Yevtikhiyev, N.N.; Karinskiy, S.S.; Mirovitskiy, D.I.; Popkov, V.T. (MIREA). Optoelectronic interferometric analog-to-digital converter. KVEKA, no. 2, 1987, 233-243.
670. Zadernovskiy, A.A.; Stolyarov, S.N. (). Sagnac effect in nonequilibrium rotation of an interferometer. PZTFD, no. 19, 1986, 1202-1206.
671. Zav'yalov, V.V.; Smol'yaninov, I.I. (IFP). Experimental observation of photoresonance of electrons located above the surface of solid hydrogen. ZETFA, vol. 92, no. 1, 1987, 339-349.
672. Zawislowski, Z.; Jannson, J.; Jannson, T. (). Method [using holographic interferometry] to determine the degree and region of change in surface microstructure. Patent Poland, no. 129473, 30 May 1986. (RZRAB, 87/2Ye349).
673. Zemlyanskiy, V.M. (). Polarization-phase effects in laser Doppler multicomponent instruments to measure velocity vectors. VINITI. Deposit, no. 7205-V, 14 Oct 1986, 75 p. (RZRAB, 87/2Ye280).

- 674. Zhoga, L.V.; Shil'nikov, A.V.; Shpeyzman, V.V.; Bulgakov, A.T. (VolISI). Anomalous dependence of the rate of creep in TsTS-19 ferroelectric ceramic, on mechanical stresses [measured by laser]. IANFA, no. 2, 1987, 410-411.
- 675. Zhukovets, Zh.G. (). Dilatometric measurements of optical materials. MTRLB, no. 9, 1986, 6-10. (RZFZA, 87/2A83).

2. Laser-Excited Optical Effects

- 676. Adomaytis, E.; Dobrovol'skis, Z.; Gorelenok, A.T.; Ignatavichus, M.; Korol'kov, V.I.; Krotkus, A.; Potsyunas, V.; Shmidt, N.M. (VilGU; IFPV). Removal of a nonequilibrium plasma from short InP:Fe photoresistors by an electric field [in studies on laser-excited photoconductivity]. FTPPA, no. 1, 1987, 70-74.
- 677. Adomaytis, E.; Galdikas, A.; Shabunina, G.G. (IFPV). Picosecond photoconductivity of ferromagnetic semiconductors. FTVTA, no. 1, 1987, 266-268.
- 678. Akimov, A.V.; Kaplyanskiy, A.A.; Moskalenko, Ye.S. (FTI). Phonon hot spot in cuprous oxide crystals. FTVTA, no. 2, 1987, 509-514.
- 679. Al'vares-Suares, V.A.; Polyanin, A.D.; Ryazantsev, Yu.S. (). Investigation of the mechanism of the coloring of photochromic solutions used in experimental hydrodynamics. ZPMFA, no. 1, 1987, 12-15.
- 680. Alekseyev, A.S.; Bonch-Osmolovskiy, M.M.; Verkyalis, I.Yu.; Galkina, T.I.; Utkin-Edin, D.P. (FIAN). Thermal pulses during optical excitation of nonequilibrium phonons in thin silicon layers. FTVTA, no. 2, 1987, 393-399.
- 681. Atutov, S.N. (IAESOAN). Light-induced drift of sodium vapor without physical adsorption on cell walls. KVEKA, no. 2, 1987, 351-355.
- 682. Bandrovskaya, I.K.; Zhikharev, V.N.; Konoplev, A.N.; Ostapchuk, L.S.; Popik, Yu.V.; Semak, D.G. (). Positive and negative optical recording in thin layers of bacterial rhodopsin. VINITI. Deposit, no. 7040-V, 8 Oct 1986, 5 p. (RZFZA, 87/1L818).
- 683. Blokha, V.B.; Ageyev, L.A.; Miloslavskiy, V.K. (). Photoinduced periodic structures in AgCl-Ag films. IANFA, no. 8, 1986, 1605-1608. (RZFZA, 87/1L780).

684. Bohm, J.; Kusch, S. (). Signal recording in magnetooptic layers (in German). Journal fuer Signalaufzeichnungsmaterialien, no. 4, 1986, 235-244. (RZFZA, 87/2L790).
685. Brazovskiy, V.Ye.; Brazovskaya, N.V. (API). Quantum theory of the motion of adsorbates in resonance fields. IANFA, no. 2, 1987, 383-388.
686. Brodin, M.S.; Gushcha, A.O.; Taranenko, L.V.; Tishchenko, V.V.; Khotyaintsev, V.N.; Shevel', S.G. (). Lux intensity characteristics of exciton luminescence in direct-gap PbI(sub2) and CdSe semiconductors at low excitation levels. FTVTA, no. 10, 1986, 2950-2958. (RZFZA, 87/2L472).
687. Czub, J.; Fiutak, J. (). Collisional and radiative relaxation of an atom excited by a laser beam (in English). ATPLB, v. A70, no. 2, 1986, 187-200. (RZFZA, 87/1L119).
688. Folin, A.K.; Chapovskiy, P.L. (). Construction of a nonphenomenological theory of light-stimulated molecular drift. OPSPA, vol. 62, no. 1, 1987, 214-216.
689. Gavrilenko, V.P.; Oks, Ye.A. (VNITsISPIV). Multiphoton resonance transitions between sublevels of a dressed atom separated by a Rabi frequency. ZTEFA, no. 1, 1987, 22-27.
690. Glebov, L.B.; Nikonorov, N.V.; Petrovskiy, G.T.; Tsekhomskiy, V.A. (). Anisotropy of absorption by color centers in photochromic glass diffusion waveguides. FKSTD, no. 5, 1986, 549-554.
691. Golovinskiy, P.A.; Berdyshev, A.V. (VISI). Separation of the inner electrons of atoms by a strong laser field. PZTFD, no. 4, 1987, 208-211.
692. Gordiyenko, V.M.; Kubyshkin, A.P.; Martynova, Ye.N.; Platonenko, V.T.; Sukhareva, N.A. (MGU). Study on intermodal energy distributions in a gas of polyatomic molecules from the infrared fluorescence of composite vibrations. KHVKA, no. 1, 1987, 83-88.
693. Gorelik, V.S.; Tochilin, S.D. (FIAN). Inelastic low-frequency opalescence in barium titanate crystalline powders. FTVTA, no. 1, 1987, 238-241.
694. Heimbrodt, W.; Goede, O. (). Energy transfer processes between Te(sub n) centers in ZnS:Te and CdS:Te (in English). PSSBB, v. B135, no. 2, 1986, 795-804. (RZFZA, 87/2L474).

695. Ishchenko, A.A.; Spiridonov, V.P.; Tarasov, Yu.I. (MGU). Electron-graphic investigation of laser-excited SF(sub6) molecules. KHFID, no. 1, 1987, 27-33.
696. Karagodova, T.Ya. (). Effect of a permanent magnetic field on the relaxation characteristics of an atom in a resonance radiation field. OPSPA, v. 61, no. 3, 1986, 457-460.
697. Kreyngol'd, F.I.; Lider, K.F. (). Resonance exciton phonon luminescence in Cu(sub2)O crystals. FTVTA, no. 9, 1986, 2765-2768. (RZFZA, 87/1L510).
698. Kukushkin, I.V.; Timofeyev, V.B. (IFTT). Radiative recombination of two-dimensional electrons with nonequilibrium holes in metal-dielectric-semiconductor silicon structures. ZETFa, vol. 92, no. 1, 1987, 258-278.
699. Kuntsevich, B.F.; Pisarchik, A.N.; Churekov, V.V. (IFANB). Phase absorption method and its use to study vibrational relaxation in gases. IFANB. Preprint, no. 431, 1986, 45 p. (RZFZA, 87/2I62).
700. Leshko, O.M.; Sheregiy, Ye.M. (DGPI). Cyclotron-phonon resonance with the absorption of phonons in InSb. ZFPRA, vol. 45, no. 2, 1987, 104-106.
701. Neizvestnyy, I.G.; Olzoyev, I.K.; Palkin, A.M.; Shegay, O.A. (MGU). Magnetoresonance oscillations of the photomagnetic effect in n-Ge. FTVTA, no. 2, 1987, 570-572.
702. Nikishov, A.I.; Ritus, V.I. (FIAN). Effect of a laser field on beta decay in nuclei and other processes occurring in the absence of the field. FIAN. Trudy, no. 168, 1986, 232-262.
703. Obukhovskiy, V.V.; Stoyanov, A.V.; Lemeshko, V.V. (KGU). Photoinduced light scattering using fluctuations of photoelectric parameters of a medium. KVEKA, no. 1, 1987, 113-121.
704. Olemskoy, A.I.; Petrunin, V.A. (IFPMSOANT). Rearrangement of the condensed state of atoms under conditions of intense external action. IVUFA, no. 1, 1987, 82-120.
705. Orlov, A.N. (IOF). Change in the adsorption potential of molecules in a field of resonance laser radiation. PZTFD, no. 3, 1987, 183-187.

706. Polyakov, I.O. (). Instability conditions of impurity centers in a high-power light field. Fizicheskiye osnovy poluprovodnikogo materialovedeniya. IPMat. Kiyev, Naukova dumka, 1986, 99-104.
707. Rastopov, S.F.; Sukhodol'skiy, A.T. (IOF). Laser-induced light-capillary effect. PZTFD, no. 2, 1987, 80-82.
708. Rudik, K.I.; Pikulik, L.G.; Chernyavskiy, V.A. (). Optical anisotropy in complex organic compound solutions induced by photoexcitation. ZPSBA, v. 45, no. 2, 1986, 283-288.
709. Skopinov, S.A.; Yakovleva, S.V. (UrPI). Photoinduced structural rearrangement of a lyotropic liquid crystal in an active medium. PZTFD, no. 2, 1987, 68-71.
710. Sorokin, A.A.; Starik, A.M. (). Thermal effects during absorption and amplification of radiation of a CO(sub2) laser in CO(sub2)-N(sub2)-O(sub2)-H(sub2)O mixtures. KHFID, no. 2, 1987, 204-212.
711. Stadnik, V.A. (IFTT). Instability of the domain of intense absorption in a semiconductor. ZFPRA, vol. 45, no. 3, 1987, 142-144.
712. Vartmann, G.; Danelyus, R.V.; Kluge, Yu.; Ozols, A.O. (). Light-sensitivity of amorphous semiconductor As-S and As-Se films under c-w and nanosecond or picosecond pulsed laser action. AVMEB, no. 1, 1987, 80-94.
713. Zandberg, E.Ya.; Knat'ko, M.V.; Paleyev, V.I. (FTI). Photo- and electron-stimulated deformations in a single layer of graphite on iridium. PZTFD, no. 7, 1986, 388-392.
714. Zaretskiy, D.F.; Malov, Yu.A. (). Nonrelativistic electrons in a field of two strong electromagnetic waves. ZETFA, v. 91, no. 4, 1986, 1302-1309.
715. Zel'dovich, B.Ya.; Pilipetskiy, N.F.; Sukhov, A.V. (IPMe). Orientational effect of an ordinary wave on a hybridly oriented nematic liquid crystal. KVEKA, no. 1, 1987, 202-204.
716. Zimin, L.G.; Gaponenko, S.V.; Perov, P.I.; Polyakov, V.I. (IFANB). Shielding of excitons during the optical excitation of CdSe. FTVTA, no. 2, 1987, 577-581.

717. Zozulya, Yu.I.; Zozulya, B.I.; Zozulya, N.I. (). Current transfer in a surface potential barrier layer. Fizicheskiye osnovy poluprovodnikogo materialovedeniya. IPMat. Kiyev, Naukova dumka, 1986, 133-135.

3. Laser Spectroscopy

718. Abrosimov, N.V.; Drozdov, N.A.; Zaks, M.B.; Kazyuchits, N.M.; Kasatkin, V.V.; Ovchinnikova, T.A.; Patrin, A.A.; Tatarchenko, V.A. (). Low-temperature photoluminescence of profiled silicon. ZPSBA, v. 46, no. 1, 1987, 132-135.
719. Absalyamova, E.Kh.; Dinmukhametova, L.P.; Mogilyuk, I.A.; Toporkov, Yu.G. (). Optical properties of soil aerosols in the infrared spectral region. IFAOA, no. 2, 1987, 130-139.
720. Achasov, O.V.; Labuda, S.A.; Ragozin, D.S.; Shabunya, S.I. (). Laser diagnostics of molecular states. Fizicheskaya gazodinamika: eksperimental'noye modelirovaniye i diagnostika. ITMO. Minsk, 1985, 30-55. (Tochnyye izmereniya i kvantovaya elektronika, no. 39, VNIIM, 1987, 669).
721. Agekyan, V.F.; Muzyka, L.N. (). Spectroscopic properties of the $Pb_{20}P_{20}S_{60}$ crystal and its analogs. Absorption, photoconductivity and luminescence. FTVTA, no. 10, 1986, 3217-3219. (RZFZA, 87/2L325).
722. Aleksandrov, Ye.B.; Akhmanov, S.A.; Gladkov, S.M.; Koroteyev, N.I.; Kulyasov, V.N.; Fedorov, A.B. (MGU). Coherent anti-Stokes Raman spectroscopy of atoms. IANFA, no. 2, 1987, 224-228.
723. Alekseyev, A.I.; Zhemerdeyev, O.V. (). Coherent spectroscopy of gas media by means of three light pulses. IANFA, no. 8, 1986, 1520-1529. (RZFZA, 87/1L857).
724. Alekseyev, V.A. (FIAN). Shape and stability of molecular resonances in nonlinear spectroscopy. FIAN. Dissertation, 1986, 24 p. (Tochnyye izmereniya i kvantovaya elektronika, no. 39, VNIIM, 1987, 548).
725. Alimarin, I.P.; Durnev, V.F.; Runov, V.K. (MGU). Optoacoustic spectrometry of condensed media and its analytical use. ZAKHA, no. 1, 1987, 5-28.

726. Antonov, V.A.; Bezruchko, V.M.; Ovechko, V.S.; Strizhevskiy, V.L. (). Infrared-radiation amplification by R-dye centers in a KCl crystal. ZPSBA, v. 46, no. 1, 1987, 148-150.
727. Arbuzov, B.A.; Shagidullin, R.R.; Vinogradova, V.S.; Mareyev, Yu.M.; Shakirov, I.Kh.; Fedotova, N.R. (KazGU; IOFKh). Preparation and vibrational spectra of various 2-alkoxy-5,6-benzo-1,3,2-dioxastibepines. IASKA, no. 2, 1987, 423-426.
728. Arsent'yev, I.N.; Antonishkis, N.Yu.; Garbuzov, D.Z.; Krasovskiy, V.V.; Komissarov, A.B.; Khalfin, V.B. (FTI). Quantum-dimensional effects in liquid-phase InGaAsP/GaAs heterostructures with an active-range thickness between 40 and 300 angstroms. FTPPA, no. 1, 1987, 178-181.
729. Asadullina, R.I.; Bezuglov, N.N.; Borisov, Ye.N.; Red'ko, T.P. (). Decay of a strontium 5(supl)P(subl) level upon collision with argon atoms under conditions of radiation trapping. OPSPA, vol. 62, no. 2, 1987, 279-284.
730. Ayvazyan, Yu.M.; Bayev, V.M.; Ivanov, V.V.; Kovalenko, S.A.; Sviridenkov, E.A. (FIAN). Kinetics of a multimode laser emission spectrum and its influence on the sensitivity of an intracavity laser spectroscopy method. KVEKA, no. 2, 1987, 279-287.
731. Azhnyuk, Yu.M.; Artamonov, V.V.; Valakh, M.Ya.; Litvinchuk, A.P. (). Raman scattering from polaritons and plasmaritons in 6H-SiC (in English). PSSBB, v. B135, no. 1, 1986, 75-84. (RZFZA, 87/1L426).
732. Baranov, A.V.; Bobovich, Ya.S.; Grebenshchikova, N.I.; Petrov, V.I.; Tsenter, M.Ya. (). Detection of resonant two- and three-photon scattering by submicroscopic semiconductor crystals. OPSPA, v. 60, no. 6, 1986, 1108-1111.
733. Barkov, L.M.; Zolotorev, M.S.; Melik-Pashayev, D.A. (). Observation of magnetic dipole transitions in the atomic samarium spectrum. OPSPA, vol. 62, no. 2, 1987, 243-244.
734. Barteneva, O.A.; Kalugin, D.Ye.; Lesina, T.M.; Reshetkina, I.V. (GOI). Spatial-frequency spectra of standard subjects of amateur photography. OPMPA, no. 1, 1987, 25-27.

735. Batog, V.N.; Karabutov, V.G.; Morozov, N.N.; Smirnov, Yu.I.; Logunov, A.V. (). Structural inhomogeneities of directionally crystallized eutectics of oxide systems. IVNMA, no. 11, 1986, 1864-1868.
736. Bayramov, B.Kh.; Lichkova, N.V.; Gol'tsev, A.V.; Timofeyev, V.D.; Toporov, V.V. (FTI). Resonance Raman scattering of light in Beta-AgI crystals. FTVTA, no. 1, 1987, 244-246.
737. Bekov, G.I.; Tursunov, A.T.; Khasanov, G.; Eshkobilov, N.B. (). Laser photoionization spectroscopy of highly excited states of a gold atom. OPSPA, vol. 62, no. 2, 1987, 273-278.
738. Bezrodnyy, V.I.; Vovk, L.V.; Zabello, Ye.I.; Tikhonov, Ye.A. (). Time and spectral evolution of a dynamic distributed feedback laser emission. ZPSBA, v. 46, no. 1, 1987, 41-47.
739. Blagoveshchenskiy, V.V.; Kholmogorov, V.Ye. (LGU). Fire structure of the fluorescence spectra of anthracene adsorbate. ZFPRA, vol. 45, no. 1, 1987, 40-41.
740. Bogdanov, D.D.; Orlova, O.A.; Rodin, A.M.; Sidorchuk, S.I.; Timakov, V.A.; Ter-Akop'yan, G.M. (OIYaI). Pulsed laser recharging device for a mass spectrometer. PRTEA, no. 1, 1987, 188-190.
741. Bogdanov, V.L.; Viktorova, Ye.N. (). Inverse deuteration effect for internal conversion from higher electron states in organic molecules. OPSPA, v. 61, no. 2, 1986, 211-213.
742. Bogomolov, V.N.; Poborchiy, V.V.; Kholodkevich, S.V. (). Size effects in the structure of electron and vibrational spectra of covalent clusters. IANFA, no. 8, 1986, 1622-1625. (RZFZA, 87/2L376).
743. Bunkin, S.B.; Gladkov, S.M.; Morozov, V.B.; Smirnov, V.B. (). Coherent anti-Stokes Raman spectroscopy of asymmetric spinning tops: $H_{(sub)2}CO$ and $H_{(sub)2}O$ molecules. OPSPA, vol. 62, no. 2, 1987, 356-359.
744. Bushuk, B.A.; Rubinov, A.N.; Murav'yev, A.A.; Zhukovskaya, A.I. (). Fluorescence in oxazine 17 in proton donor and aprotic solvents under steady-state and picosecond excitation. ZPSBA, v. 45, no. 3, 1986, 396-400.

745. Chernobrodov, Ye.G.; Sheroziya, G.A. (). The detection limits for a laser atomic fluorescence spectrometer with a laser sample selection method. ZAKHA, no. 1, 1987, 48-52.
746. Chmel', A.; Sochivkin, G.M. (FTI). Annealing kinetics of structural defects in vitreous SiO₂ [determined by Raman spectral. FKSTD, no. 1, 1987, 88-91.
747. Darmanyany, A.P.; Matveyev, M.Yu. (IKhF). Kinetics of luminescence damping of singlet oxygen in polymers. Effect of the polymer matrix on the quenching of the triplet state of the sensitizer by molecular oxygen. KHFID, no. 11, 1986, 1488-1495.
748. Dmitriyev, A.K.; Nekrasov, Yu.V. (). Relationship of diffraction to light beam cross-sections in a laser with a telescopic resonator. IZTEA, no. 1, 1987, 20-22.
749. Dudak, I.A.; Gorelik, V.S.; Venevtsev, Yu.N. (FIAN). Raman scattering in a quantum ferroelectric in the liquid helium temperature range. KRSFA, no. 1, 1987, 27-29.
750. Dzhidzhoyev, M.S.; Ivanov, S.V.; Chugunov, A.V. (MGU). Study on multiphoton and cascade absorption processes of high-power IR fields by ozone molecules. IANFA, no. 2, 1987, 254-258.
751. Dzhotyan, G.P.; Muradyan, A.Zh.; Petrosyan, L.S. (). Induced variation of light-beam polarization. OPSPA, vol. 62, no. 2, 1987, 392-397.
752. Galanov, Ye.K.; Potikhonov, G.N.; Oksanich, A.P. (). Investigation of the distribution of localized centers in GaAs by magnetic circular dichroism. FTPPA, no. 2, 1987, 330-332.
753. Golubev, V.G.; Ivanov-Omskiy, V.I.; Osutin, A.V.; Polyakov, D.G. (FTI). The g-factors of donor levels in GaAs. Spin-orbital interaction in an impurity-center field. FTPPA, no. 1, 1987, 30-36.
754. Gorbatenko, A.A. (MGU). Modernization of a laser spectrometer based on a nitrogen laser to reduce the detection limits in laser atomic ionization. VINITI. Deposit, no. 7574-V, 6 Nov 1986, 42-45. (RZFZA, 87/2L565).

755. Govorkov, S.V.; Koroteyev, N.I.; Shumay, I.L. (). Local measurement of crystal symmetry in near-surface layers of semiconductor crystals by means of second harmonic generation and active reflection spectroscopy. IANFA, no. 4, 1986, 683-689. (RZFZA, 87/1L1112).
756. Kamalov, V.F.; Kvach, V.V.; Koroteyev, N.I.; Toleutayev, B.N.; Chikishev, A.Yu.; Shkurinov, A.P. (MGU). Dynamics of stimulated electron states of polyatomic molecules: Study by picosecond coherent anti-Stokes Raman spectroscopy. ZFPRA, v. 45, no. 2, 1987, 69-72.
757. Kamalov, V.F.; Toleutayev, B.N.; Chernyayeva, Ye.B.; Khurshilova, Z.A. (MGU). Picosecond fluorescence spectroscopy of hematoporphyrin in biological specimens. IANFA, no. 2, 1987, 238-242.
758. Karapetyan, G.O.; Konstantinov, A.V.; Maksimov, L.V. (). Using Rayleigh and Brillouin spectroscopy to study sodium silicate and sodium borate glasses. FKSTD, no. 3, 1986, 314-322. (RZFZA, 87/1L418).
759. Karapetyan, G.O.; Konstantinov, V.A.; Maksimov, L.V.; Reznichenko, P.V. (LPI). Structure of sodium borosilicate glasses from Rayleigh and Brillouin spectroscopy data. FKSTD, no. 1, 1987, 16-21.
760. Kharitonov, Yu.A. (). Tenth All-Union Scientific Conference on Using Vibrational Spectra to Study Inorganic and Coordination Compounds, Moscow, 2-4 Oct 1985. KOZHA, no. 11, 1986, 1568-1573. (RZFZA, 87/2L108).
761. Klochkov, V.P.; Korsakova, Ye.G.; Verkhovskiy, Ye.B. (). Effect of excitation energy on spectral-luminescent properties of organic molecules in higher electron states. OPSPA, vol. 62, no. 2, 1987, 360-367.
762. Kolesnikov, N.N.; Rostovskiy, V.S.; Starosotnikov, M.I. (). Formula to determine the sizes of nuclei [in terms of mean square radii], allowing for shell effects [according to laser spectroscopy data]. UFIZA, no. 8, 1986, 1131-1135. (RZFZA, 87/1V132).
763. Konshina, Ye.A. (GOI). Structural features of carbon films, obtained in an acetylene plasma. OPMPA, no. 2, 1987, 15-18.

764. Kornev, V.V.; Pavlova, I.A.; Pivovarov, S.S. (). Spectral and luminescence properties of activated quartz ceramics. IVNMA, no. 1, 1987, 145-147.
765. Korotayev, O.N.; Yurchenko, A.I.; Karpov, V.P. (). Studying dipole moments of molecules by modulation Stark spectroscopy of dips. OPSPA, v. 61, no. 4, 1986, 756-760.
766. Krauze, A.S.; Perelygin, I.S. (). Study on vibrational and orientational relaxation of liquid acetonitrile molecules in terms of spontaneous Raman spectra. ZPSBA, v. 45, no. 3, 1986, 453-460.
767. Kulakovskiy, V.D.; Shepel', B.N.; Denisov, A.A.; Senichkin, A.P. (IFTT). Luminescence of selectively doped $n\text{-Al}(\text{sub}x)\text{Ga}(\text{sub}1-x)\text{As}/\text{GaAs}/n\text{-Al}(\text{sub}x)\text{Ga}(\text{sub}1-x)\text{As}$ heterostructures. FTTPA, no. 1, 1987, 42-49.
768. Kuleshov, N.V.; Boykov, V.N.; Krasovskiy, A.N. (BGUNIIFP). Selective excitation of luminescence from uranylsulfate alcohol solutions. DBLRA, no. 1, 1987, 47-50.
769. Leonov, Ye.I.; Semenov, A.Ye.; Shcherbakov, A.G. (). Simultaneous analysis of vibrational spectra of $\text{Bi}(\text{sub}12)\text{SiO}(\text{sub}20)$, $\text{Bi}(\text{sub}12)\text{GeO}(\text{sub}20)$ and $\text{Bi}(\text{sub}12)\text{TiO}(\text{sub}20)$ crystals. FTVTA, no. 5, 1986, 1590-1593. (RZFZA, 87/1L431).
770. Lobanov, B.D.; Maksimova, N.T.; Matyagin, Yu.V.; Raspopov, N.A.; Savchenko, A.N.; Sviridenkov, E.A. (FIAN). Recording of the absorption spectrum of the atmosphere at 1.10-1.28 μm by intracavity laser spectroscopy. FIAN. Preprint, no. 228, 1986, 10 p. (RZFZA, 87/2L1190).
771. Lushnikov, S.G.; Prokhorova, S.D.; Siniy, I.G.; Smolenskiy, G.A. (FTI). Elastic properties of a $\text{CsDSeO}(\text{sub}4)$ crystal in a monoclinic phase. FTVTA, no. 2, 1987, 496-502.
772. Lyubimtsev, V.A.; Yermolayev, V.L. (). Effect of change in the equilibrium configuration of complex molecules in the $S(\text{sub}1)$ state, on the correctness of estimation of lifetimes of their upper excited singlet states in liquid solutions. OPSPA, v. 61, no. 4, 1986, 766-770.
773. Mal'shukov, A.G. (ISAN). Inelastic background intensity in giant Raman scattering. FTVTA, no. 1, 1987, 272-274.

774. Manuylov, K.K. (IPM). Numerical modeling of the parameters of a laser spectrometer of aerosol particles. IPM. Preprint, no. 125, 1985, 26 p. (Tochnyye izmereniya i kvantovaya elektronika, no. 39, VNIIM, 1987, 678).
775. Mashchenko, V.Ye.; Kharsik, V.F.; Brezhneva, S.V. (). Secondary emission of excitons in CuCl polycrystals (in English). PSSBB, v. B135, no. 1, 1986, 201-206. (RZFZA, 87/1L514).
776. Matveyev, O.I.; Pribytkov, V.A. (). Resonance-ionization detection of photons by sodium atoms in an argon atmosphere. ZPSBA, v. 46, no. 1, 1987, 24-28.
777. Naumov, A.Yu.; Permogorov, S.A.; Popova, T.B.; Reznitskiy, A.N.; Zhulay, V.Ya.; Novozhilov, V.A.; Spendiarov, N.N. (FTI). Concentration shift of gap width of a ZnSe(subl-x)Te(subx) solid solution where x is greater than or equal to 0 and less than or equal to 1. FTPPA, no. 2, 1987, 350-353.
778. Permogorov, S.A. (). Resonance spectra of free excitons. Fizika soyedineniy A(II)B(VI). Moskva, Nauka, 1986, 146-183, 305-308. (RZFZA, 87/1L337).
779. Petnikova, V.M.; Pleshanov, S.A.; Shuvalov, V.V. (MGU). Non-Markov model of nonlinear susceptibility of organic dye solutions. VMUFA, no. 5, 1986, 71-73. (RZFZA, 87/2L1213).
780. Preobrazhenskiy, N.G. (). New trends in optogalvanic spectroscopy. KHPLD, no. 13, 1987, 114-131.
781. Ramendik, G.I. (). Prospects for quantitative mass-spectrometric analysis of solids without reference samples. Zentralinstitut fuer Isotopen- und Strahlenforschung der DDR. Mitteilungen, no. 115, 1986, 39-48. (RZFZA, 87/1V409).
782. Rebane, I. (). Theory of two-step photo burning of spectral holes. ETFMB, no. 3, 1985, 296-301. (RZFZA, 87/1L888).
783. Rebane, L.A.; Blumberg, G.E.; Fefer, Ye.M.; Fimberg, T.A. (). Measuring the excitation profiles of resonance Raman scattering in binary step scanning. ETFMB, no. 3, 1986, 291-295. (RZFZA, 87/1L642).

784. Rebane, L.A.; Blumberg, G.E.; Fimberg, T.A. (IKhBFANES). Resonance amplification of single-phonon light scattering and excitation profiles of quasilocal modes in KBr:Mn(sup-)(sub4) crystals. ZFPRA, v. 44, no. 7, 1986, 339-342.
785. Regel', V.R.; Nikitenko, V.A.; Kuz'mina, I.P.; Galstyan, V.G.; Dolukhanyan, T.P.; Nikul'shin, S.F.; Sizova, N.L.; Skuratov, V.A. (IKAN). Effect of the bombardment of high-energy heavy ions on optical characteristics and defects in single crystals of zinc oxide. ZTEFA, no. 2, 1987, 306-310.
786. Rodionov, G.D. (IAESOAN). Experimental laser polarization spectroscopy study on relaxation processes in neon. IAESOAN. Dissertation, 1986, 18 p. (Tochnyye izmereniya i kvantovaya elektronika, no. 39, VNIIM, 1987, 679).
787. Rys', A.G. (LGU). Electron impact alignment in a gas-discharge positive-column plasma. LGU. Dissertation, 1986, 18 p. (Tochnyye izmereniya i kvantovaya elektronika, no. 39, VNIIM, 1987, 336).
788. Sapozhnikov, M.N. (FIAN). Photochemical hole burning study on dephasing of electron states and spectral diffusion of molecules in amorphous matrices at low temperatures. KRSFA, no. 1, 1987, 10-12.
789. Sapozhnikov, M.N. (FIAN). Dependence of the shape of the luminescence spectrum of impurity molecular centers on the frequency of monochromatic exciting radiation in systems with quasilocal vibrations. KRSFA, no. 2, 1987, 3-6.
790. Sapozhnikov, M.N. (FIAN). Dependence of the shape of the luminescence spectrum of impurity molecules on time during selective laser excitation. KRSFA, no. 2, 1987, 7-10.
791. Sapozhnikov, M.N.; Zhukov, Ye.A. (FIAN). Effect of quasilocal vibrations on the temperature properties of phononless lines in the optical spectra of impurity molecular crystals. KRSFA, no. 1, 1987, 13-15.
792. Serdyukov, V.I. (TGU). Intracavity molecular spectroscopy using color center lasers. TGU. Dissertation, 1985, 15 p. (Tochnyye izmereniya i kvantovaya elektronika, no. 39, VNIIM, 1987, 661).

793. Stanishvskiy, I.V. (IFANB). Fine structure spectra of porphyrin derivatives under selective laser excitation at 42 K. IFANB. Dissertation, 1986, 18 p. (Tochnyye izmereniya i kvantovaya elektronika, no. 39, VNIIM, 1987, 677).
794. Terekhov, S.N.; Ksenofontova, N.M.; Gurinovich, I.F.; Grubina, L.A. (). Resonance Raman spectra of Zn-octaethylchlorin and its anion forms. ZPSBA, v. 45, no. 2, 1986, 232-239.
795. Udartsev, A.M.; Kim, V.G.; Iordanidi, G.K.; Mashakova, S.M.; Ksandopulo, G.I. (). Optogalvanic laser spectroscopy of flames. ZPSBA, v. 46, no. 1, 1987, 38-41.
796. Valeyko, M.V.; Zasavitskiy, I.I.; Matveyenko, A.V.; Matsonashvili, B.N.; Sakseyev, D.A. (FIAN). Photoluminescence of quantum-dimensional stressed epitaxial layers and structures based on $\text{Pb}(\text{subl-x})\text{Sn}(\text{subx})\text{Te}$. FTPPA, no. 1, 1987, 57-62.
797. Varshal, B.G.; Denisov, V.N.; Mavrin, B.N.; Murashov, V.A.; Podobedov, V.B.; Sterin, Kh.Ye.; Yakovlev, V.A. (NIIS). Vibrational spectra of glass and $\text{Ba}(\text{sub2})\text{TiSi}(\text{sub2})\text{O}(\text{sub8})$ single crystal. FKSTD, no. 1, 1987, 74-78.
798. Vasil'yeva, I.G.; Kolesov, B.A. (INKh). Beta modification of $\text{La}(\text{sub2})\text{S}(\text{sub3})$. IVNMA, no. 11, 1986, 1786-1789.
799. Vikharev, A.L.; Gitlin, M.S.; Ivanov, O.A.; Polushkin, I.N.; Stepanov, A.N.; Shcherbakov, A.I. (IPF). Heating of nitrogen in a pulsed microwave discharge under conditions of intense excitement of electron levels of molecules. PZTFD, no. 4, 1987, 223-226.
800. Voron'ko, Yu.K.; Kudryavtsev, A.B.; Osiko, V.V.; Sobol', A.A.; Sorokin, Ye.V. (IOF). Raman spectroscopy of $\text{Li}(\text{sub2})\text{O}-\text{Nb}(\text{sub2})\text{O}(\text{sub5})$ melts. KRSFA, no. 2, 1987, 34-36.
801. Voronov, S.A.; Yakovlev, V.A. (). Effect of a thin silver film on absorption and dispersion of a dielectric optical waveguide. OPSPA, vol. 62, no. 2, 1987, 446-449.
802. Voropay, Ye.S.; Gusenkov, S.N.; Yermalitskiy, F.A.; Sayechnikov, V.A. (GAOUK). Precision locking module with subnanosecond resolution. PRTEA, no. 1, 1987, 243.

803. Voytsekhovich, V.S.; Grinenko, V.M.; Danilevko, M.V.; Nechiporenko, V.N.; Fal', A.M.; Yatsenko, L.P. (IFANUK). Frequency-modulated resonances in ring lasers [used for ultrahigh resolution spectroscopy]. IFANUK. Preprint, no. 22, 1986, 44 p.
804. Vysochanskiy, Yu.M.; Gurzan, M.I.; Rizak, V.M.; Seykovskaya, L.A.; Slivka, V.Yu.; Furtsev, V.G.; Khoma, M.M. (UzhGU). Soft phonon spectrum and phase diagram form of $\text{Sn(Pb)}_{\text{(sub2)}}\text{P}(\text{sub2})\text{S}(\text{Se})_{\text{(sub6)}}$ ferroelectrics. FTVTA, no. 2, 1987, 530-534.
805. Wieszka, J.; Renucci, M.; Zwick, A. (). Raman scattering in cadmium arsenide thin films (in English). ATPLB, v. A69, no. 5, 1986, 881-883. (RZFZA, 87/1L424).
806. Zakurdayev, I.V.; Suslov, A.I.; Sheroziya, G.A. (). Laser atomic ionization spectrometer. Elektronnaya promyshlennost', no. 1, 1986, 35-37. (Tochnyye izmereniya i kvantovaya elektronika, no. 39, VNIIM, 1987, 671).
807. Zel'tser, L.Ye.; Vereshchagina, N.G.; Talipov, Sh.T. (TashGU). Using different excitation sources to obtain quasilinear low-temperature luminescence spectra of organic phosphors based on metal complexes to determine various inorganic substances. ZAKHA, no. 1, 1987, 53-57.
808. Zhmyreva, I.A.; Kolobkov, V.P.; Kolobkova, Ye.V.; Morozova, I.N.; Chikovskiy, A.N. (). Spectroscopic study on the structure of tungsten borate glasses. FKSTD, no. 1, 1987, 67-73.
809. Zhurkov, S.N.; Novak, I.I.; Poretskiy, S.A.; Yakimenko, I.Yu. (FTI). Light scattering study on the kinetics of microscopic crack generation in alkali-halide crystals. FTVTA, no. 1, 1987, 156-164.
810. Zolin, V.F.; Tsaryuk, V.I.; Markushev, V.M. (). Electron-vibrational spectra of Eu^{3+} in lanthanide formates. KOZHA, no. 11, 1986, 1498-1503. (RZFZA, 87/2L482).
811. Zorov, N.B.; Kuzyakov, Yu.Ya.; Novodvorskiy, O.A.; Chaplygin, V.I. (). Optogalvanic effect in flames at atmospheric pressure. KHPLD, no. 13, 1987, 131-163.

J. BEAM-TARGET INTERACTION

1. Miscellaneous Targets

812. Avrutskiy, I.A.; Golubenko, G.A.; Svakhin, A.S.; Sychugov, V.A.; Tishchenko, A.V. (IOF). Formation of a periodic microrelief using the surface of a waveguide structure upon exposure to laser radiation. ZTEFA, no. 1, 1987, 199-202.
813. Avrutskiy, I.A.; Golubenko, G.A.; Svakhin, A.S.; Sychugov, V.A.; Tishchenko, A.V. (IOF). Analysis of structural changes on the surface of a layered medium exposed to laser radiation. KVEKA, no. 1, 1987, 67-70.
814. Bagdasarov, Kh.S.; Bogdanov, N.Ya.; Uyukin, Ye.M. (). Elimination of thermally induced internal optical inhomogeneities in $\text{LiNbO}_3:\text{Nd}$. Fizika kristallizatsii. Kalinin, 1986, 112-113. (RZFZA, 87/1L459).
815. Bagdasarov, Kh.S.; Bogdanov, N.Ya.; Uyukin, Ye.M. (). Pyroelectric mechanism of heat-induced optical damage. Fizika kristallizatsii. Kalinin, 1986, 110-112. (RZFZA, 87/2L390).
816. Cherednik, V.I.; Chirimanov, A.P. (GGU). Numerical modeling of transient processes in erosional laser fluxes interacting with condensed media. VINITI. Deposit, no. 7038-V, 4 Oct 1986, 2-11. (RZFZA, 87/1G239).
817. Demochko, Yu.A. (). Models of degradation of resistance to laser radiation by optical elements. Izmereniya, kontrol', avtomatizatsiya, no. 3/59, Moskva, 1986, 72-79. (RZFZA, 87/2L640).
818. Devyatko, Yu.N.; Tapinskaya, O.V. (MIFI). Nonequilibrium effects and phase transitions in binary matter under the action of radiation. IANFA, no. 2, 1987, 378-382.
819. Draganescu, V.; Dumitras, D.C.; Mihailescu, I.N.; Farcas, I.; Nemes, G.; Gutu, I.; Stratan, A.; Velculescu, G.; Axinte, C.; Julea, T. (). New results on laser heat treatment of materials (in Romanian). SCEFA, no. 9, 1986, 868-884. (RZFZA, 87/1L1292).

820. Golubev, V.S. Bagratashvili, V.N. (book reviewers); Veyko, V.P. (author of reviewed book) (). New book on laser technology. Review of book: Lazernaya obrabotka plnochnykh elementov (Laser processing of film elements), by V.P. Veyko. Leningrad, Mashinostroyeniye, 1986. KVEKA, no. 2, 1987, 431-432.
821. Gusev, V.E.; Kozlova, Ye.Z.; Portnyagin, A.I. (MGU). Role of thermogradient phenomena in laser electrochemistry. KVEKA, no. 2, 1987, 323-327.
822. Johansen, H.H. (). Scanning electron microscopy characterization of alloy junctions in silicon produced by laser-induced diffusion (in English). EXPPA, no. 2, 1986, 123-129. (RZFZA, 87/1Yel007).
823. Kaschner, C.; Witzmann, A.; Gaertner, K.; Goetz, G. (). Laser annealing of ion-implanted NiSi layers. PSSAB, v. A94, no. 2, 1986, 787-791. (RZFZA, 87/1Yel011).
824. Kondratenko, P.S.; Orlov, Yu.N. (VNII OFI). Spatial and time characteristics of periodic structures produced by laser radiation on the surface of metals and semiconductors. ZETFA, vol. 92, no. 2, 1987, 616-624.
825. Kotlyarov, V.P. (). Surface finishing and strengthening treatment by laser irradiation. EOBMA, no. 1, 1987, 16-20.
826. Kuchugurnyy, Yu.P.; Chernay, A.V. (ITM). Absorption of light by micro inclusions in lead azide. VINITI. Deposit, no. 7571-V, 4 Nov 1986, 11 p. (RZFZA, 87/2L1146).
827. Lakhtin, Yu.M.; Kogan, Ya.D.; Podrugin, V.N.; Tarasova, T.V. (). Correlation of c-w and pulsed laser heat treatment of materials. PFKMD, no. 11, 1986, 123-129. (RZRAB, 87/2Ye321).
828. Maksimov, V.V.; Orishich, A.M. (ITPM). Generation of gas clouds from pulsed CO2 irradiation of polymer materials. TVYTA, no. 1, 1987, 162-164.
829. Rybalov, M.A.; Nadezhkin, Yu.M.; Lisitsyn, V.S.; Fokin, A.N. (). Measuring the coefficients of absorption of laser radiation by optical components and elements of lasers. Fotometriya i yeye metrologicheskoye obespecheniye. CVNTK FMO, 6th, 27-3. Oct 1986. Tezisy dokladov. Moskva, 1986, 166. (RZRAB, 87/2Ye283).

830. Rybka, V.; Odzhayev, V.; Cervena, J.; Hnatowicz, V.; Kvitek, J.; Jelinkova, H. (). Laser annealing of bismuth-implanted (111) silicon. PSSAB, v. A95, no. 2, 1986, 511-515. (RZFZA, 87/1Yel006).
831. Sotnikov, V.T.; Dobrotvorskiy, S.S.; Zapechel'nyuk, E.F.; Dobrotvorskaya, M.V.; Galiy, P.V. (). Role of thermal and electron excitations in change in surface stoichiometry of alkali halide crystals under the action of concentrated energy fluxes. FTVTA, no. 7, 1986, 2254-2257. (RZFZA, 87/1Yel004).
832. Sotnikov, V.T.; Dobrotvorskiy, S.S.; Zapechel'nyuk, E.F.; Dobrotvorskaya, M.V. (). Self-excited vibrations in charged particle emission from the surface of optically transparent media under nonlinear absorption of laser radiation. PFKMD, no. 9, 1986, 103-110. (RZFZA, 87/2L1150).
833. Vapnik, V.N.; Danileyko, Yu.K.; Lebedeva, T.P.; Minayev, Yu.P.; Mikhail'skiy, A.I. (IOF). Numerical simulation of laser damage to an optical material with defects. KVEKA, no. 2, 1987, 295-299.
834. Yemel'yanov, V.I. (MGU). Laser-induced phase transition in ruby: spontaneous breakdown of symmetry in saturation of transitions. IANFA, no. 2, 1987, 264-268.

2. Metal Targets

835. Ageyev, V.G.; Vovchenko, V.I.; Krasnyuk, I.K.; Ni, A.L.; Pashinin, P.P.; Prokhorov, A.M.; Semenov, A.Yu.; Fortov, V.Ye. (IOF). Dynamics of the stagnation of thin foils in a xenon atmosphere. PZTFD, no. 1, 1987, 3-9.
836. Al'tshuler, G.B.; Yermolayev, V.S.; Putilin, E.S.; Starovoytov, S.F. (LITMO). Effect of low-threshold destruction of thin aluminum films by laser pulses. PZTFD, no. 3, 1987, 152-155.
837. Anisimov, V.N.; Bol'shov, L.A.; Krivoruchko, K.A.; Malyuta, D.D.; Reshetin, V.P.; Sebrant, A.Yu.; Soloukhin, R.I. (ITMO). Absorption of infrared radiation in metallic capillaries. KVEKA, no. 1, 1987, 177-184.
838. Arutyunyan, R.V.; Baranov, V.Yu. (IAE). Thermohydrodynamic models of the effect of repetitively pulsed radiation on materials. KVEKA, no. 2, 1987, 271-278.

839. Arutyunyan, R.V.; Bol'shov, L.A.; Goloviznin, V.M.; Korshunov, V.K.; Chudanov, V.V. (). Fusion displacement under unsteady laser action on metals. DANKA, vol. 292, no. 1, 1987, 89-92.
840. Astapchik, S.A.; Chebot'ko, I.S. (FTIB). Anisothermic diffusion transitions in solid state metals and alloys. VABFA, no. 1, 1987, 23-29.
841. Bazhenov, V.V.; Bonch-Bruyevich, A.M.; Buzykin, O.G.; Burmistrov, A.V.; Gagarin, A.P.; Dorofeyev, V.G.; Kogan, M.N.; Kucherov, A.N.; Libenson, M.N.; Makin, V.S.; Pudkov, S.D.; Us'kov, V.M. (). Study on energy-mass-exchange processes during the heating of metals by intense light. ZTEFA, no. 2, 1987, 279-285.
842. Bonch-Bruyevich, A.M.; Maksimov, Yu.N.; Przhibel'skiy, S.G.; Khromov, V.V. (). Photo-emission of neutral atoms from a metal surface. ZETFA, vol. 92, no. 1, 1987, 285-290.
843. Devoyno, O.G.; Sitkevich, M.V.; Spiridonov, N.V. (BPI). Surface alloying with boron and chromium during laser heating. VABFA, no. 1, 1987, 51-56.
844. Golubets, V.M.; Kozub, V.V.; Shchuyko, M.I.; Moysa, M.I.; Pashechko, M.I. (FMIANUkr). Effect of a corrosive medium on the wear on steel during cavitation. FKMA, no. 1, 1987, 29-32.
845. Ivanets, S.S.; Nakhodkin, N.G.; Novosel'skaya, A.I. (). Growth kinetics of island films of tin condensed from an erosional laser plasma. IANFA, no. 8, 1986, 1586-1589. (RZFZA, 87/1Ye535).
846. Khodakovskiy, V.I.; Macheyko, I.O. (). Laser hardening of parts for marine internal combustion engines. Puti uskoreniya nauchno-tehnicheskogo progressa v sudoremonte. Tezisy dokladov. Vladivostok, 1986, 75-77. (RZVTA, 87/1V127).
847. Kirillin, A.V.; Malyshenko, S.P.; Osipov, O.I.; Khodakov, K.A. (IVTAN). Study on processes of laser heat treatment of the surfaces of metal products. TVYTA, no. 1, 1987, 125-129.
848. Kokora, A.N.; Romanov, G.S.; Stankevich, Yu.A.; Uglov, A.A. (). Laser plasma and its effect on the thermal physical processes in a zone of treatment of a metal by laser radiation. FKOMA, no. 1, 1987, 54-61.

849. Korotchenko, A.I.; Pchelintsev, A.I.; Samokhin, A.A.; Sidorin, A.V. (IOF). Formation of a ring relief on a metal surface after pulsed action of a concentrated flow of energy ZTEFA, no. 1, 1987, 166-168.
850. Larionov, V.P.; Bolotina, N.P.; Argunova, T.V.; Tyunin, V.D.; Lebedev, M.P. (). Effect of laser treatment on the structure and composition of plasma sputtered coatings of Ni-Cr-Si-B system films. FKOMA, no. 1, 1987, 73-77.
851. Leshchinskiy, L.K.; Samotugin, S.S.; Shvel, V.V.; Pirch, I.I.; Makar, O.A. (ZhMI; FMIANUkr). Increasing the wear resistance of certain rolled steels by surface plasma treatment. FKMA, no. 1, 1987, 106-108.
852. Levchenko, A.A.; Tananko, I.A.; Guyva, R.T.; Guyva, V.A.; Kaftanova, O.N. (). Laser strain hardening of high-strength cast iron crankshafts. FKOMA, no. 1, 1987, 62-68.
853. Lushnikov, A.A.; Pakhomov, A.V.; Chernyayeva, G.A. (). Fractal dimensionality of aggregates formed under laser volatilization of metals. DANKA, vol. 292, no. 1, 1987, 86-88.
854. Minyayev, V.A.; Belkin, P.N.; Medvedovskaya, L.A. (). Technological aspects and selection of the thickness of strengthened layers in local methods of instrument treatment. EOBMA, no. 1, 1987, 21-23.
855. Pogrebnyak, A.D.; Remnev, G.Ye.; Chistyakov, S.A.; Ligachev, A.Ye. (NIIYaFT). Modification of the properties of metals under the action of high-power ion beams. IVUFA, no. 1, 1987, 52-65.
856. Polukhin, V.P.; Dzyuba, V.A.; Beletskiy, V.V.; Nikolayev, V.A.; Ivanov, S.A. (MISIS). Laser surface hardening of working rollers of Kh9VMF-Sh steel. STALA, no. 2, 1987, 92-94.
857. Uglov, A.A.; Selishchev, S.V. (IMET). Instability of the screening of a concentrated energy flow by means of an intense viscous discharge of vapors from a material. ZTEFA, no. 1, 1987, 103-108.
858. Vorob'yev, A.Ya.; Kuz'minchev, V.M. (). Absorption and reflection of high-power laser radiation by D16 duralumin alloys. Fotometriya i yeye metrologicheskoye obespecheniye. CVNTKFM, 6th, 27-31 Oct 1986. Tezisy dokladov. Moskva, 1986, 43. (RZRAB, 87/2Ye408).

859. Yemel'yanov, V.I.; Seminogov, V.N. (). Anomalous high absorptivity and anomalously fast heating of a rough surface of condensed media by electromagnetic radiation. KVEKA, no. 1, 1987, 47-54.
860. Yevtushenko, N.G.; Kostyuk, S.G.; Mal'gota, A.A.; Men Chun Von; Chesnokov, M.N. (). Kinetics of phase transformations during the oxidation of titanium under conditions of laser activity. FKOMA, no. 1, 1987, 49-53.
861. Zubov, V.I.; Krivtsov, V.M.; Naumova, I.N.; Shmyglevskiy, Yu.D. (). Numerical comparison of various models of metal vaporization. ZVMFA, no. 11, 1986, 1740-1743. (RZFZA, 87/2Ye1087).
862. Zverev, S.Ye. (FIAN). Effect of the pulse shape and absorption kinetics of radiation on the process of pulsed laser hardening of steels. FIAN. Preprint, no. 282, 1986, 40 p. (RZFZA, 87/2Ye1090).

3. Dielectric Targets

863. Atanasov, P.A.; Pavlov, E.L. (). Laser cutting of cylindrical glasses (in English). Bulgarian Journal of Physics, no. 1, 1986, 83-91. (Tochnyye izmereniya i kvantovaya elektronika, no. 39, VNIIM, 1987, 168).
864. Borodin, V.G.; Glebov, L.B.; Yefimov, O.M.; Migel', V.M.; Migel', L.I.; Petrovskiy, G.T.; Pimenov, Yu.D. (). Effect of the focusing of radiation and quality of the treatment of surfaces of an optical system on the measurement of optical breakdown thresholds. KVEKA, no. 1, 1987, 106-112.

4. Semiconductor Targets

865. Avanesyan, S.M.; Gusev, V.E. (MGU). Generation of sound in the relaxation process of photoexcitation at the surface of semiconductor crystals. IANFA, no. 2, 1987, 248-253.
866. Budzulyak, I.M. (). Subthreshold changes in the structure of PbTe and CdTe under laser irradiation. Fizicheskiye osnovy poluprovodnikogo materialovedeniya. IPMat. Kiyev, Naukova dumka, 1986, 78-82.
867. Danilevich, O.I. (). Lasers in the technology of semiconductor electronics. Fizicheskiye osnovy poluprovodnikogo materialovedeniya. IPMat. Kiyev, Naukova dumka, 1986, 86-95.

868. Gusakov, G.M.; Komarnitskiy, A.A. (MIET). Anomalous behavior of the optical parameters of silicon under pulsed laser heating. PZTFD, no. 3, 1987, 166-170.
869. Gusakov, G.M.; Komarnitskiy, A.A. (MIET). Effect of multiple pulsed laser radiation on the morphology of a germanium surface. PZTFD, no. 3, 1987, 170-174.
870. Kashkarov, P.K.; Burdel', K.K.; Dzhidzhoyev, M.S.; Zenkov, Yu.V.; Platonenko, V.T.; Popov, V.K.; Chechenin, N.G. (). Generation of defects in the near-surface region of gallium phosphide under the action of excimer laser radiation. PFKMD, no. 9, 1986, 111-114. (RZFZA, 87/2Yel086).
871. Onopko, V.V.; Kacher, I.E.; Dovgoshey, N.I.; Rigan, M.Yu.; Kobal', V.A. (UzhGU). Adhesion and stressed state of $\text{CdGa}(\text{sub}2)\text{Se}(\text{sub}4)$ films. IVNMA, no. 11, 1986, 1804-1807.
872. Pavlyuk, V.I. (). Preparation and various properties of laser condensates of cadmium antimonide. Fizicheskiye osnovy poluprovodnikogo materialovedeniya. IPMat. Kiyev, Naukova dumka, 1986, 112-115.
873. Reshetov, V.I.; Byshuyeva, G.V.; Zinenkova, G.M.; Nasibov, A.S.; Pechenov, A.N.; Tyapunina, N.A. (FIAN). Damage to CdS single crystals by laser self-emission. KVEKA, no. 1, 1987, 164-167.
874. Zaginey, A.A.; Kotlyarchuk, B.K.; Kurilo, I.V.; Kushnir, Z.O.; Savitskiy, G.V. (IPPM). Morphological characteristics of mercury telluride crystals under pulsed laser annealing. IVNMA, no. 1, 1987, 42-47.
875. Zaporozhets, Yu.B.; Mintsev, V.B.; Fortov, V.Ye. (). Metal phase formation during the compression of silicon by shock waves. PZTFD, no. 4, 1987, 204-207.

K. PLASMA GENERATION AND DIAGNOSTICS

876. Ageyev, V.A.; Khlopkov, Yu.V. (). Estimation of the reproduction of the intensity of spectral lines of an electrical discharge stabilized by a laser beam. ZPSBA, v. 46, no. 2, 1987, 302-305.
877. Aleynikov, V.N.; Areshidze, M.G.; Klimchitskaya, G.L. (). Laser satellites in spectra of single-electron multicharged ions and the problem of measuring electric fields in a plasma. MTRLB, no. 8, 1986, 45-52. (RZFZA, 87/1L138).
878. Askar'yan, G.A.; Rayevskiy, I.M. (IOF). Laser simulation of light and plasma action on comets and planets. KVEKA, no. 2, 1987, 229-231.
879. Basov, N.G.; Volovski, Ye.; Gamaliy, Ye.G.; Denus, S.; Pisarchik, T.; Rupasov, A.A.; Sarkisov, G.S.; Sklizkov, G.V.; Tikhonchuk, V.T.; Shikanov, A.S. (FIAN). Recording of spontaneous magnetic fields in a laser plasma at the Del'fin-1 installation. ZFPRA, vol. 45, no. 4, 1987, 173-176.
880. Bulanin, V.V.; Yesipov, L.A.; Korneyev, D.O.; Ushakov, S.N.; Yashukova, N.V. (LPI). Small-scale oscillations of a magnetic field and plasma density in the FT-2 tokamak. PZTFD, no. 3, 1987, 179-183.
881. Degtyareva, V.P.; Kravtsov, S.B.; Kuz'michev, A.V.; Motylev, S.L. (IOF). Possibility of obtaining strong magnetic fields by means of a laser magnetohydrodynamic generator with positive feedback along the magnetic field. IOF. Preprint, no. 212, 1986, 40 p. (RZFZA, 87/1G113).
882. Denus, S.; Vil'chinskiy, A.; Volovski, Ye.; Zakharenkov, Yu.A.; Kosterin, A.V.; Mruz, V.; Nagraba, S.; Pavlovich, V.; Sklizkov, G.V.; Farny, Yu.; Shikanov, A.S. (FIAN). Study on the scattering symmetry in a plasma corona of a laser-irradiated microsphere. KRSFA, no. 2, 1987, 40-42.
883. Foerster, E.; Goetz, K. (). Laser plasma as an x-ray source in the nanosecond range. Wissenschaftliche Beitraege Martin-Luether Universitaet Halle-Wittenberg, Reihe O, no. 20, 1986, 105-118. (RZFZA, 87/2G162).

884. Gayazov, R.R.; Kramida, A.Ye.; Podobedova, L.I.; Ragozin, Ye.N.; Chirkov, V.A. (FIAN). Experimental study on the $2p(\sup{5})3s$, $3p$ and $3d$ configurations in ions of the isoelectronic sequence of Ne I. Rentgenovskaya spektroskopiya plazmy i svoystva mnogozyadnykh ionov. FIAN. Trudy, no. 179, 1987, 60-87.
885. Latush, Ye.L. (). Population inversion in a recombining plasma (review). Inversnaya zaselennost' i generatsiya na perekhodakh v atomakh i molekulakh. CVSIzGPA, Tomsk, 1986. Tezisy dokladov. Part 1. Tomsk, 1986, 4. (RZRAB, 87/2Ye425).
886. Margolin, L.Ya.; Polonskiy, L.Ya.; Pyatnitskiy, L.N. (IVTAN). Scattering of heating radiation by an extended laser spark. PZTFD, no. 4, 1987, 218-223.
887. Mazing, M.A.; Shevel'ko, A.P. (FIAN). Ionization properties of a laser plasma. Rentgenovskaya spektroskopiya plazmy i svoystva mnogozyadnykh ionov. FIAN. Trudy, no. 179, 1987, 3-14.
888. Mazing, M.A.; Shevel'ko, A.P. (FIAN). Spectra of Ca XIX and Ti XXI helium-like ions in a laser plasma. Rentgenovskaya spektroskopiya plazmy i svoystva mnogozyadnykh ionov. FIAN. Trudy, no. 179, 1987, 15-38.
889. Ryabtsev, A.N.; Churilov, S.S.; Viar, Zh.F. (). Configurations in Ni-like $RbX-MoXV$ ions. OPSPA, vol. 62, no. 2, 1987, 258-263.
890. Sukhov, L.T. (IFSOAN). Optical characteristics of laser plasma at late stages of expansion. KVEKA, no. 2, 1987, 317-322.
891. Veresh, M.F.; Zapesochnyy, I.P.; Starodub, V.P. (). Negative absorption at 812.6 nm by a lithium atom in a continuous He-Li plasma jet. OPSPA, vol. 62, no. 2, 1987, 245-247.
892. Vinogradov, A.V.; Shlyaptsev, V.N. (FIAN). Characteristics of a laser-plasma X-ray source. KVEKA, no. 1, 1987, 5-26.
893. Zaytsev, N.K.; Pushkarev, V.A.; Shaparev, N.Ya. (IFSOAN; VTsSOAN; KrGU). Dynamic optogalvanic effect in neon plasma. IVUFA, no. 2, 1987, 84-89.

III. MONOGRAPHS, BOOKS, CONFERENCE PROCEEDINGS

894. Arkhipkin, V.G.; Popov, A.K. (auths); Akhmanov, S.A. (ed). (). Nonlinear conversion of light in gases. Nelineynoye preobrazovaniye sveta v gazakh. IFSOAN. Novosibirsk, Nauka, 1987, 144 p.
895. Azimov, R.K.; Shipulin, Yu.G. (). Optoelectronic transducers based on hollow lightguides for measuring large displacements. Optoelektronnyye preobrazovateli bol'shikh peremeshcheniy na osnove polykh svetovodov. Series: Biblioteka po avtomatike (Library on automation), no. 664. Moskva, Energoatomizdat, 1987, 57 p.
896. Babin, P.A. (ed). (). Electron excitations and structural defects of crystals. Elektronnyye vozbuzhdeniya i strukturnyye defekty kristallov. KhabGPI. Khabarovsk, 1986, 125 p. (RZFZA, 87/2L307).
897. Bondarenko, B.V. (ed). (MFTI). Physical phenomena in electronic instruments. Fizicheskiye yavleniya v elektronnykh priborakh. MFTI. Moskva, 1986, 129 p. (RZFZA, 87/1zh3).
898. Brodin, M.S.; Blonskiy, I.V. (). Exciton processes in layered crystals. Eksitonnyye protsessy v sloystykh kristallakh. Kiyev, naukova dumka, 1986, 253 p. (RZFZA, 87/1L336).
899. Delone, N.B.; Kraynov, V.P. (). Fundamentals of nonlinear optics in atomic gases. Osnovy nelineynoy optiki atomarnykh gazov. Moskva, Nauka, 1986, 184 p.
900. Dianov, Ye.M. (ed). (IOF). Fiber optics. Volokonnaya optika. IOF. Trudy, no. 5, 1987, 160 p.
901. Dianov, Ye.M.; Kasymdzhanov, M.A. (eds). (). Technology and properties of fiber lightguides. Republic School on Fiber Optics, Tashkent, 24-28 Sep 1984. Lectures. Tekhnologiya i svoystva volokonnykh svetovodov. CRShVOpt, Tashkent, 24-28 Sep 1984. Tashkent, Fan, 1986, 202 p. (RZFZA, 87/1L24).
902. Donecker, J. (). Experimental techniques for solid-state spectroscopy. Experimentelle Technik der Festkoerperspektroskopie. East Berlin, Akademie Verlag, 1985, 166 p. (RZFZA, 87/2L578).

903. Dubinovskiy, A.M.; Pankov, E.D. (). Bench tests and adjustment of optoelectronic instruments. Stendovyye ispytaniya i regulirovka optiko-elektronnykh priborov. Series: Biblioteka priborostroitelya (Instrument maker's library). Leningrad, Mashinostroyeniye, 1986, 152 p.
904. Fabrikant, V.A. (ed). (MEI). Applied physical optics. Prikladnaya fizicheskaya optika. MEI. Nauchnyye trudy, no. 60, 1985, 165 p. (Tochnyye izmereniya i kvantovaya elektronika, no. 39, VNIIM, 1987, p. 161).
905. Feygel'son, Ye.M. (ed). (). Optics of the atmosphere and aerosols. Optika atmosfery i aerazol'. Moskva, Nauka, 1986, 224 p. (RZFZA, 87/2L796).
906. Gitsu, D.V.; Kantser, V.G.; Popovich, N.S. (). Trinary narrowband A(III)B(V)C(sub2)(VI) semiconductors and their solid solutions. Phase interaction, band structure and transfer phenomena. Troynyye uzkozonnyye poluprovodniki A(III)B(V)C(sub2)(VI) i ikh tverdyye rastvory. Kishinev, Shtiintsa, 1986, 306 p. (RZFZA, 87/2N273).
907. Guseva, M.B.; Dubinina, Ye.M. (MGU). Physical fundamentals of solid state electronics. Fizicheskiye osnovy tverdotel'noy elektroniki. MGU. Moskva, 1986, 312 p. (RZFZA, 87/2A31).
908. High-power CO2 lasers for plasma experiments and technology. Moshchnyye CO2-lazery dlya plazmennyykh eksperimentov i tekhnologii. ITPM. Novosibirsk, 1986, 176 p. (RZFZA, 87/2L1224).
909. Iordan, G.G. (ed). (). Prospects for development of methods and means to measure flows. Perspektivy razvitiya metodov i sredstv izmereniya raskhoda. NIITEPLOPRIBOR. Moskva, 1985, 105 p. (Tochnyye izmereniya i kvantovaya elektronika, no. 39, VNIIM, 1987, p. 161).
910. Ishanin, G.G. (). Radiation detectors for optical and optoelectronic instruments. Priyemniki izlucheniya opticheskikh i optikoelektronnykh priborov. Leningrad, Mashinostroyeniye, 1986, 175 p. (RZFZA, 87/1L659).

911. Itigin, A.M. (ed). (). Optomechanical and electrooptic instruments. Optiko-mekhanicheskiye i elektronno-opticheskiye pribory. NIIGAik. Vol. 25(65), Novosibirsk, 1985, 156 p. (Tochnyye izmereniya i kvantovaya elektronika, no. 39, VNIIM, 1987, p. 161).
912. Kolotyrkin, Ya.M. (ed). (). Vibrational spectra of polyatomic molecules. Kolebatel'nyye spektry mnogoatomnykh molekul. Moskva, Nauka, 1986, 283 p. (RZFZA, 87/1L148).
913. Kotyuk, A.F.; Kurchatov, Yu.A.; Mayboroda, Yu.P.; Nikolayev, V.K.; Stysin, V.Ye.; Surodin, M.P.; Tikhomirov, S.V.; Khleskova, T.N. (). Introduction to the technology of measuring optophysical parameters of lightguide systems. Vvedeniye v tekhniku izmereniy optiko-fizicheskikh parametrov svetovodnykh sistem. Moskva, Radio i svyaz', 1987, 225 p.
914. Kovalenko, V.S.; Golovko, L.F.; Podchernyayeva, I.A. (). Laser and electroerosion hardening of materials. Lazernoye i elektro-erozionnoye uprocheniye materialov. Moskva, Nauka, 1986, 276 p. (Tochnyye izmereniya i kvantovaya elektronika, no. 39, VNIIM, 1987, 266).
915. Miroshnikov, M.M. (ed). (GOI). Optics of liquid crystals. Optika zhidkikh kristallov. GOI. Trudy, v. 60, no. 194, 1986, 133 p. (Tochnyye izmereniya i kvantovaya elektronika, no. 39, VNIIM, 1987, p. 161).
916. Muradyan, A.G.; Gol'dfarb, I.S.; Inozemtsev, V.P. (). Optical cables for multichannel communication lines. Opticheskiye kabeli mnogokanal'nykh liniy svyazi. Moskva, Radio i svyaz', 1987, 200 p.
917. Naboykin, Yu.V.; Samartsev, V.V.; Zinov'yev, P.V.; Silayeva, N.B. (). Coherent spectroscopy of molecular crystals. Kogerentnaya spektroskopiya molekulyarnykh kristallov. Kiyev, Naukova dumka, 1986, 203 p. (RZFZA, 87/2L1172).
918. Petrash, G.G. (ed). (FIAN). Lasers using vapors of metals and their halides. Lazery na parakh metallov i ikh galogenidov. FIAN. Trudy, no. 181, 1987, 193 p.
919. Physics and technology of reactors. Papers of seminars on the use of nuclear reactors in physics research, 1983-1984. Fizika i tekhnika reaktorov. Materialy seminarov po primeneniyu yadernykh reaktorov v fizicheskikh issledovaniyakh, 1983-1984. Leningrad, 1986, 138 p. (RZFZA, 87/1V3).

920. Photometry and its metrological provision. All-Union Scientific and Technical Conference, 6th, 27-31 Oct 1986. Summaries of the reports. Fotometriya i yeye metrologicheskoye obespecheniye. CVNTKFM0, 6th, 27-31 Oct 1986. Tezisy dokladov. Moskva, 1986, 303 p. (RZFZA, 87/2A20).
921. Presnyakov, L.P.; Shevel'ko, V.P.; Yanev, R.K. (). Elementary processes involving multicharged ions. Elementarnyye protsessy s uchastiyem mnogozaryadnykh ionov. Moskva, Energoatomizdat, 1986, 200 p. (RZFZA, 87/2G35).
922. Protopopov, V.V.; Ustinov, N.D. (). Infrared laser ranging systems. Inftrakrasnyye lazernyye lokatsionnyye sistemy. Moskva, Voennoye izdatel'stvo, 1987, 175 p.
923. Protsenko, Ye.D. (). Gas lasers in metrology. Gazovyye lazery v metrologii. MIFI. Moskva, Energoatomizdat, 1986, 76 p. (Tochnyye izmereniya i kvantovaya elektronika, no. 39, VNIIM, 1987, p. 161).
924. Samarskiy, A.A. (ed); et al. (). Mathematical modeling. Obtaining single crystals and semiconductor structures. Matematicheskoye modelirovaniye. Polucheniye monokristallov i poluprovodnikovyykh struktur. Moskva, Nauka, 197 p. (RZFZA, 87/2Ye540).
925. Samarskiy, A.A.; Kurdyumov, S.P.; Galaktionov, V.A. (eds). (). Mathematical modeling. Processes in nonlinear media. Matematicheskoye modelirovaniye: protsessy v nelineynykh sredakh. Moskva, Nauka, 1986, 312 p. (Tochnyye izmereniya i kvantovaya elektronika, no. 39, VNIIM, 1987, 16).
926. Sevast'yanenko, V.G.; Fomin, N.A. (eds). (). Physical gasdynamics: experimental modeling and diagnostics. Fizicheskaya gazodinamika: eksperimental'noye modelirovaniye i diagnostika. ITMO. Minsk, 1985, 164 p. (Tochnyye izmereniya i kvantovaya elektronika, no. 39, VNIIM, 1987, p. 162).
927. Sheremet'yev, A.G. (). Fiberoptic gyroscope. Volokonnyy opticheskiy giroskop. Moskva, Radio i svyaz', 1987, 152 p.
928. Skogorev, V.P. (). Lasers in geodesy. Lazery v geodezii. TsNIIGAiK. Moskva, Nedra, 1987, 120 p.

929. Sobel'man, I.I. (ed). (FIAN). X-ray spectroscopy of plasma and properties of multicharged ions. Rentgenovskaya spektroskopiya plazmy i svoystva mnogozaryadnykh ionov. FIAN. Trudy, no. 179, 1987, 192 p.
930. Sokolov, A.V. (ed). (). All-Union School-Seminar on the Propagation of Millimeter and Submillimeter Waves in the Atmosphere, 2nd. Summaries of the lectures and reports. CVShSRMS, 2nd. Tezisy lektsiy i dokladov. Frunze, Ilim, 1986, 262 p. (RZFZA, 87/2Zh126).
931. Soloukhin, R.I. (ed). (). Thermophysical and physical chemical processes in power plants. Teplofizicheskiye i fiziko-khimicheskiye protsessy v energeticheskikh ustanovkakh. ITMO. Minsk, 1986, 165 p. (Tochnyye izmereniya i kvantovaya elektronika, no. 39, VNIIM, 1987, p. 162).
932. Stepanov, B.I. (). Lasers today and tomorrow. Lazery segodnya i zavtra. Minsk, Nauka i tekhnika, 1987, 127 p.
933. Svechnikov, G.S. (auth); Bulakov, S.S. (ed). (). Elements of integrated optics. Elementy integral'noy optiki. Series: Massovaya biblioteka inzhenera "Elektronika" (Elektronika engineer's data bank). Moskva, Radio i svyaz', 1987, 105 p.
934. Tovstyuk, K.D. (ed). (). Physical fundamentals of semiconductor materials science. Fizicheskiye osnovy poluprovodnikogo materialovedeniya. IPMat. Kiyev, Naukova dumka, 1986, 148 p.
935. Transient processes in semiconductors and dielectrics. Nestatsionarnyye protsessy v poluprovodnikakh i dielektrikakh. MIFI. Moskva, Energoatomizdat, 1986, 92 p. (RZFZA, 87/1N2).
936. Triplet excitations in molecular crystals. Republic Seminar on Spin-Selective Processes in Excited Triplet States, Cherkassy, 18-20 Jun 1985. Proceedings. Tripletnyye возбуждениya v molekulyarnykh kristallakh. CRSSSPVT, Cherkassy, 18-20 Jun 1985. Trudy. FTINT. VINITI. Deposit, no. 6590-V, 1986, 190 p. (RZFZA, 87/1L393).

937. Uglov, A.A.; Selishchev, S.V. (auths); Rykalin, N.N.; Anisimov, S.I. (eds). (IMET). Self-excited vibrational processes under the action of concentrated energy fluxes. Avtokolebatel'nyye protsessy pri vozdeystvii kontsentririrovannykh potokov energii. IMET. Series: Nauka i tekhnicheskii progress (Science and technical progress). Moskva, Nauka, 1987, 152 p.
938. Vaynshteyn, L.A.; Shevel'ko, V.P. (). Structure and characteristics of ions in a hot plasma. Struktura i kharakteristiki ionov v goryachey plazme. Moskva, Nauka, 1986, 215 p. (RZFZA, 87/2G36).
939. Vorob'yev, V.V. (auth); Tatarskiy, V.I. (ed). (). Thermal self-action of laser radiation in the atmosphere. Teplovoye samovozdeystviye lazernogo izlucheniya v atmosfere. IFA. Moskva, Nauka, 1987, 200 p.
940. Zuyev, V.Ye.; Komarov, V.S. (). Statistical models of atmospheric temperature and gas components. Statisticheskiye modeli temperatury i gazovykh komponent atmosfery. Series: Sovremennyye problemy atmosfernoy fiziki, no. 1. Leningrad, Gidrometeoizdat, 1986, 264 p. (Tochnyye izmereniya i kvantovaya elektronika, no. 39, VNIIM, 1987, 546).

IV. SOURCE ABBREVIATIONS

(Note: CTC = cover-to-cover translation available)

AKZHA	Akusticheskiy zhurnal (CTC)
ANPYA	Annalen der Physik (Leipzig)
ATPLB	Acta physica polonica. Series A
AVMEB	Avtometriya (CTC)
CRABA	Bolgarskaya akademiya nauk. Doklady (formerly: Bulgarska akademiya na naukite. Doklady)
CRShVOpt	Respublikanskaya shkola po volokonnoy optike
CRSSSPVT	Respublikanskiy seminar po spin-selektivnym protssam v возбuzhdennykh tripletnykh sostoyaniyakh
CVNTKFMO	Vsesoyuznaya nauchno-tekhnicheskaya konferentsiya: Fotometriya i yeye metrologicheskoye obespecheniye
CVShSRMS	Vsesoyuznaya shkola-simpozium po rasprostraneniyu millimetrovykh i submillimetrovykh voln v atmosfere
CVSIZGPA	Vsesoyuznoye soveshchaniye: Inversnaya zaselennost' i generatsiya na perekhodakh v atomakh i molekulakh
CVSRadme	Vsesoyuznoye soveshchaniye: Radiometeorologiya
CZYPA	Czechoslovak Journal of Physics
DANKA	Akademiya nauk SSSR. Doklady (CTC)
DBLRA	Akademiya nauk BSSR. Doklady
EKVZA	Elektrosvyaz' (CTC)
ELKCA	Elektrotechnicky casopis
EOBMA	Elektronnaya obrabotka materialov (CTC)
ETFMB	Akademiya nauk Estonskoy SSR. Izvestiya. Fizika, matematika
EXPPA	Eksperimentelle Technik der Physik

FGVZA	Fizika gorennya i vzryva (CTC)
FKMMA	Fiziko-khimicheskaya mekhanika materialov (CTC)
FKOMA	Fizika i khimiya obrabotki materialov
FKSTD	Fizika i khimiya stekla (CTC)
FOOSD	Fundamental'nyye osnovy opticheskoy pamyati i sredy
FTPPA	Fizika i tekhnika poluprovodnikov (CTC)
FTVTA	Fizika tverdogo tela (CTC)
IAAFA	Akademiya nauk Armyanskoy SSR. Izvestiya. Fizika
IANFA	Akademiya nauk SSSR. Izvestiya. Seriya fizicheskaya (CTC)
IASKA	Akademiya nauk SSSR. Izvestiya. Seriya khimicheskaya (CTC)
IFAOA	Akademiya nauk SSSR. Izvestiya. Fizika atmosfery i okeana (CTC)
ISTVA	Severo-Kavkazkiy nauchnyy tsentr vysshey shkoly. Izvestiya. Yestestvennyye nauki (Rostov-na-Donu)
IVMEA	Visshiya mashino-elektrotekhnicheskiy institut "Lenin". Izvestiya (Sofia)
IVNMA	Akademiya nauk SSSR. Izvestiya. Neorganicheskiye materialy (CTC)
IVUBA	Izvestiya vysshikh uchebnykh zavedeniy. Priborostroyeniye (CTC)
IVUFA	Izvestiya vysshikh uchebnykh zavedeniy. Fizika (CTC)
IVUZB	Izvestiya vysshikh uchebnykh zavedeniy. Radioelektronika
IVYRA	Izvestiya vysshikh uchebnykh zavedeniy. Radiofizika (CTC)
IZTEA	Izmeritel'naya tekhnika (CTC)
KFKKA	Kozponti fizikai kutato intezet kozlemenyek (Budapest)

KHFID	Khimicheskaya fizika (CTC)
KHPLD	Khimiya plazmy
KHVKA	Khimiya vysokikh energiy (CTC)
KOZHA	Kolloidnyy zhurnal (CTC)
KRSFA	Kratkiye soobshcheniya po fizike (CTC)
KVEKA	Kvantovaya elektronika (journal, Moskva) (CTC)
LFSBA	Litovskiy fizicheskiy sbornik (CTC)
MSRGA	Messen, Steuern, Regeln (East Berlin)
MTRLB	Metrologiya
OPMPA	Optiko-mekhanicheskaya promyshlennost' (CTC)
OPSPA	Optika i spektroskopiya (CTC)
OTIZD	Otkrytiya, izobreteniya (formerly included in OIPOB)
PAKBA	Promyshlennost' Armenii
PFKMD	Poverkhnost'. Fizika, khimiya, mekhanika (Moskva)
PRTEA	Pribory i tekhnika eksperimenta (CTC)
PSSAB	Physica status solidi (A). Applied Research (GDR)
PSSBB	Physica status solidi (B). Basic Research (GDR)
PZTFD	Zhurnal tekhnicheskoy fiziki. Pis'ma (CTC)
RAELA	Radiotekhnika i elektronika (journal, Moskva) (CTC)
RATEA	Radiotekhnika (journal, Moskva) (CTC)
RZFZA	Referativnyy zhurnal. Fizika
RZGFA	Referativnyy zhurnal. Geofizika
RZMIB	Referativnyy zhurnal. Metrologiya i izmeritel'naya tekhnika
RZRAB	Referativnyy zhurnal. Radiotekhnika
RZVTA	Referativnyy zhurnal. Vodnyy transport

SCEFA	Studii si cercetari de fizica
STALA	Stal'
TKTEA	Tekhnika kino i televideniya
TMFZA	Teoreticheskaya i matematicheskaya fizika (CTC)
TVYTA	Teplofizika vysokikh temperatur (CTC)
UFIZA	Ukrainskiy fizicheskiy zhurnal (Russian language version) (CTC)
UFNAA	Uspekhi fizicheskikh nauk (CTC)
UKZHA	Ukrainskiy khimicheskiy zhurnal (CTC)
VABFA	Belorusskiy universitet. Vestnik. Seriya fiziko-tekhnichesk'kh nauk
VBSFA	Akademiya nauk Belorusskoy SSR. Izvestiya. Seriya fiziko-matematicheskikh nauk
VEOFA	Vestnik oftal'mologii
VMUFA	Moskovskiy universitet. Vestnik. fizika, astronomiya (CTC)
VNUKA	Akademiya nauk Ukrayns'koy RSR. Visnyk
ZAKHA	Zhurnal analiticheskoy khimii (CTC)
ZETFA	Zhurnal eksperimental'noy i teoreticheskoy fiziki (CTC)
ZFKHA	Zhurnal fizicheskoy khimii (CTC)
ZFPRA	Zhurnal eksperimental'noy i teoreticheskoy fiziki. Pis'ma (CTC)
ZNPFa	Zhurnal nauchnoy i prikladnoy fotografii i kinematografii (CTC)
ZPMFA	Zhurnal prikladnoy mekhaniki i tekhnicheskoy fiziki (CTC)
ZPSBA	Zhurnal prikladnoy spektroskopii (CTC)
ZTEFA	Zhurnal tekhnicheskoy fiziki (CTC)
ZVMFA	Zhurnal vychislitel'noy matematiki i matematicheskoy fiziki (CTC)

V. AUTHOR AFFILIATIONS

API

Altayskiy politekhnicheskiy institut
Altay Polytechnical Institute, Barnaul

BashGU

Bashkirskiy gosudarstvennyy universitet
Bashkir State university

BGUNIIFP

NII fiziko-khimicheskikh problem Belorusskogo
gos universiteta
Scientific Research Institute of Physical
Chemistry Problems at Belorussian State
University, Minsk

BPI

Belorusskiy politekhnicheskiy institut
Belorussian Polytechnical Institute, Minsk

DGPI

Drogobychskiy gosudarstvennyy pedagogicheskiy institut
Drogobych State Pedagogical Institute

FIAN

Fizicheskiy institut im Lebedeva AN SSSR
Physics Institute imeni Lebedev, Academy of Sciences
USSR, Moscow

FMIANUkr

Fiziko-mekhanicheskiy institut AN Ukr SSR
Physical Mechanical Institute, Academy of Sciences
Ukrainian SSR, L'vov

FTI

Fiziko-tekhnicheskiy institut im Ioffe AN SSSR
Physicotechnical Institute im Ioffe, Academy of
Sciences USSR, Leningrad

FTIB

Fiziko-tekhnicheskiy institut AN BSSR
Physicotechnical Institute, Academy of Sciences
Belorussian SSR

FTINT

Fiziko-tekhnicheskiy institut nizkikh temperatur AN UkrSSR
Physicotechnical Institute of Low Temperature Physics
Academy of Sciences Ukrainian SSR, Khar'kov

GAOUK

Glavnaya astronomicheskaya observatoriya AN UkrSSR
Main Astronomical Observatory, Academy of Sciences
Ukrainian SSR, Kiev

GGU

Gor'kovskiy gos universitet
Gor'kiy State University

GOI

Gosudarstvennyy opticheskiy institut im Vavilova
State Optical Institute imeni Vavilov, Leningrad

GrodGU

Grodnenskiy gos universitet
Grodno State University

IAE

Institut atomnoy energii im Kurchatova
Institute of Atomic Energy imeni Kurchatov, Moscow

IAESOAN

Institut avtomatiki i elektrometrii SOAN
Institute of Automation and Electronic Measurements,
Siberian Branch Academy of Sciences USSR

IEMEZh

Institut evolyutsionnoy morfologii i ekologii
zhivotnykh im A.N. Severtsova AN SSSR
Institute of Evolutionary Morphology and Animal
Ecology imeni Severtsov, Academy of Sciences
USSR, Moscow

IFA

Institut fiziki atmosfery AN SSSR
Institute of Atmospheric Physics, Academy of
Sciences, USSR

IFANB

Institut fiziki AN BSSR
Institute of Physics, Academy of Sciences
Belorussian SSR, Minsk

IFANBMO

Mogilevskiy filial Instituta fiziki AN BSSR
Mogilev Branch of the Institute of Physics,
Academy of Sciences Belorussian SSR

IFANUK

Institut fiziki AN UkrSSR
Institute of Physics, Academy of Sciences Ukrainian SSR,
Kiev

IFP

Institut fizicheskikh problem AN SSSR
Institute of Problems of Physics, Academy of
Sciences USSR

IFPMSOANT

Institut fiziki prochnosti i materialovedeniya
Tomskogo filiala SOAN
Institute of Physics of Strength of Materials and
Materials Science, Tomsk Branch, Siberian Branch
Academy of Sciences USSR

IFPSOAN

Institut fiziki poluprovodnikov SOAN
Institute of Semiconductor Physics, Siberian Branch
Academy of Sciences USSR, Novosibirsk

IFPV

Institut fiziki poluprovodnikov AN LitSSR
Institute of Semiconductor Physics, Academy of Sciences
Lithuanian SSR, Vilnius

IFSOAN
 Institut fiziki SOAN
 Institute of Physics, Siberian Branch Academy of
 Sciences USSR, Krasnoyarsk

IFTT
 Institut fiziki tverdogo tela AN SSSR
 Institute of Solid State Physics, Academy of
 Sciences USSR, Chernogolovka

IFVE
 Institut fiziki vysokikh energiy
 Institute of High Energy Physics, Serpukhov

IKAN
 Institut kristallografii AN SSSR
 Institute of Crystallography, Academy of Sciences
 USSR, Moscow

IKhAN
 Institut khimii AN SSSR
 Institute of Chemistry, Academy of Sciences USSR,
 Gor'kiy

IKhBFANes
 Institut khimicheskoy i biologicheskoy fiziki
 AN EstSSR
 Institute of Chemical and Biological Physics,
 Academy of Sciences Estonian SSR

IKhF
 Institut khimicheskoy fiziki AN SSSR
 Institute of Physics of Chemistry, Academy of Sciences
 USSR, Chernogolovka

IKhKG
 Institut khimicheskoy kinetiki i goreniya SOAN
 Institute of Chemical Kinetics and Combustion,
 Siberian Branch Academy of Sciences USSR, Novosibirsk

IKKh
 Institut kollodnoy khimii i khimii vody AN UkrSSR
 Institute of Colloid Chemistry and Chemistry of Water,
 Academy of Sciences Ukrainian SSR, Kiev

IMET
 Institut metallurgii im Baykova
 Institute of Metallurgy imeni Baykov, Moscow

Informsvyaz'
 Tsentr nauchno-tekhnicheskoy informatsii i propagandy
 po svyazi "Informsvyaz'", Ministerstvo svyazi SSSR
 Center for Scientific and Technical Information and
 Propaganda on Communications, USSR Ministry of
 Communications, Moscow

INKh
 Institut neorganicheskoy khimii SOAN
 Institute of Inorganic Chemistry, Siberian Branch
 Academy of Sciences USSR

IOA
 Institut optiki atmosfery SOAN
 Institute of Atmospheric Optics, Siberian Branch
 Academy of Sciences USSR

IOF
 Institut obshchey fiziki AN SSSR
 Institute of General Physics, Academy of Sciences
 USSR, Moscow

IOFKh
 Institut organicheskoy i fizicheskoy khimii
 Kazanskogo filiala AN SSSR
 Institute of Organic and Physical Chemistry,
 Kazan' Branch, Academy of Sciences USSR

IPANUK
 Institut poluprovodnikov AN UkrSSR
 Institute of Semiconductors, Academy of Sciences
 Ukrainian SSR, Kiev

IPF
 Institut prikladnoy fiziki AN SSSR
 Institute of Applied Physics, Academy of Sciences
 USSR, Gor'kiy

IPM
 Institut prikladnoy matematiki AN SSSR
 Institute of Applied Mathematics, Academy of Sciences
 USSR

IPMat
 Institut problem materialovedeniya AN UkrSSR
 Institut of Problems of Material Science,
 Academy of Sciences Ukrainian SSR

IPMe
 Institut problem mekhaniki AN SSSR
 Institute of Problems of Mechanics, Academy of Sciences
 USSR, Moscow

IPPM
 Institut prikladnykh problem mekhaniki i matematiki
 AN UkrSSR
 Institute of Applied Problems in Mechanics and
 Mathematics, Academy of Sciences Ukrainian SSR, L'vov

IRE
 Institut radiotekhniki i elektroniki AN SSSR
 Institute of Radioengineering and Electronics, Academy
 of Sciences USSR, Moscow

IRFEANUK
 Institut radiofiziki i elektroniki AN UkrSSR
 Institute of Radiophysics and Electronics, Academy of
 Sciences Ukrainian SSR

ISAN
 Institut spektroskopii AN SSSR
 Institute of Spectroscopy, Academy of Sciences USSR

ISE
 Institut sil'notochnoy elektroniki SOAN
 Institute of High-Current Electronics, Siberian Branch
 Academy of Sciences USSR, Tomsk

ITF
 Institut teplofiziki SOAN
 Institute of Thermophysics, Siberian Branch Academy of
 Sciences USSR, Novosibirsk

ITM
 Institut tekhnicheskoy mekhaniki AN UkrSSR
 Institute of Engineering Mechanics, Academy of Sciences
 Ukrainian SSR, Dnepropetrovsk

ITMO
 Institut teplo- i massoobmena AN BSSR
 Institute of Heat and Mass Exchange, Academy of Sciences
 Belorussian SSR

ITPM
 Institut teoreticheskoy i prikladnoy mekhaniki SOAN
 Institute of Theoretical and Applied Mechanics, Siberian
 Branch Academy of Sciences USSR, Novosibirsk

IVTAN
 Institut vysokikh temperatur AN SSSR
 Institute of High Temperatures, Academy of Sciences USSR

IYaFANUz
 Institut yadernoy fiziki AN UzSSR
 Institute of Nuclear Physics, Academy of Sciences
 Uzbek SSR, Ulugbek

KazGU
 Kazakhskiy gos universitet
 Kazakh State University, Alma Ata

KGPI
 Kuybyshevskiy gos pedagogicheskiy institut
 Kuybyshev State Pedagogical Institute

KGU
 Kiyevskiy gos universitet
 Kiev State University

KhabGPI
 Khabarovskiy gos pedagogicheskiy institut
 Khabarovsk State Pedagogical Institute

KIIGA
 Kiyevskiy institut inzhenerov grazhdanskoy aviatsii
 Kiev Institute of Civil aviation Engineers

KPI
 Kishinevskiy politekhnicheskii institut
 Kishinev Polytechnic Institute

KPIA
 Kiyevskiy politekhnicheskii institut
 Kiev Polytechnic Institute

KrGU
 Krasnoyarskiy gos universitet
 Krasnoyarsk State University

LETI
 Leningradskiy elektrotekhnicheskiy institut
 Leningrad Electric Engineering Institute
 LGPI
 Leningradskiy gos pedagogicheskiy institut
 Leningrad State Pedagogical Institute
 LGU
 Leningradskiy gos universitet
 Leningrad State University
 LIAP
 Leningradskiy institut aviatsionnogo priborostroyeniya
 Leningrad Institute of Aviation Instrument Manufacture
 LITMO
 Leningradskiy institut tochnoy mekhaniki i optiki
 Leningrad Institute of Precision Mechanics and Optics
 LPI
 Leningradskiy politekhnicheskiy institut
 Leningrad Polytechnic Institute
 LTITSBP
 Leningradskiy tekhnologicheskiy institut
 tsellyulozno-bumazhnoy promyshlennosti
 Leningrad Technological Institute of the
 Wood-Pulp and Paper Industry
 MAI
 Moskovskiy aviatsionnyy institut
 Moscow Aviation Institute
 MEI
 Moskovskiy energeticheskiy institut
 Moscow Power Engineering Institute
 MFTI
 Moskovskiy fiziko-tekhnicheskiy institut
 Moscow Physicotechnical Institute
 MGPI
 Moskovskiy gos pedagogicheskiy institut
 Moscow State Pedagogical Institute
 MGU
 Moskovskiy gos universitet
 Moscow State University
 MIET
 Moskovskiy institut elektronnoy tekhniki
 Moscow Institute of Electronic Engineering
 MIFI
 Moskovskiy inzhenerno-fizicheskiy institut
 Moscow Engineering Physics Institute
 MIKhM
 Moskovskiy institut khimicheskogo mashinostroyeniya
 Moscow Institute of Chemical Machine Building

MIREA
 Moskovskiy institut radiotekhniki, elektroniki i
 avtomatiki
 Moscow Institute of Radio Engineering, Electronics
 and Automation

MISIS
 Moskovskiy institut stali i splavov
 Moscow Institute of Steel and Alloys

MNIIMG
 Moskovskiy NII mikrokhirurgii glaza MZ RSFSR
 Moscow Scientific Research Institute of Microsurgery
 of the Eye, Ministry of Health, Russian SFSR

MVTU
 Moskovskoye vyssheye tekhnicheskoye uchilishche im
 Baumana
 Moscow Higher Technical College imeni Bauman

NIFKhI
 NI fiziko-khimicheskoy institut im Karpova
 Scientific Research Institute of
 Physicochemistry imeni Karpov

NIIFL
 NII fiziki pri Leningradskom gos universitete
 Scientific Research Institute of Physics at Leningrad
 State University

NIIGAik
 Novosibirskiy institut inzhenerov geodezii,
 aerofotos"yemki i kartografii
 Novosibirsk Institute for Engineers of Geodesy,
 Aerial Surveying and Cartography

NIIMF
 NII mekhaniki i fiziki Saratovskogo GU
 Scientific Research Institute of Mechanics and
 Physics of Saratov State University

NIIPMM
 NII prikladnoy matematiki i mekhaniki pri Tomskom GU
 Scientific Research Institute of Applied Mathematics
 and Mechanics at Tomsk State University

NIIS
 Gosudarstvennyy NII stekla
 State Scientific Research Institute of Glass, Moscow

NIITEPLOPRIBOR
 Gos NII teploenergeticheskogo priborostroyeniya
 State Scientific Research Institute of Thermal
 Power Machine Building, Moscow

NIIVN
 NII vysokikh napryazheniy Tomskogo politekhnicheskogo
 instituta
 Scientific Research Institute of High Voltage of the
 Tomsk Polytechnic Institute

NIIYaF

NII yadernoy fiziki pri Moskovskom gos universitete
Scientific Research Institute of Nuclear Physics at
Moscow State University

NITsTLAN

NI tsentr po tekhnologicheskim lazeram AN SSSR
Scientific Research Center for Industrial Lasers,
Academy of Sciences USSR

OEIS

Odesskiy elektrotekhnicheskiy institut svyazi
Odessa Electrotechnical Institute of Communications

OIYaI

Ob"yedinennyy institut yadernykh issledovaniy
Joint Institute of Nuclear Research, Dubna

RGU

Rostovskiy-na-Donu gos universitet
Rostov on Don State University

SFTI

Sibirskiy fiziko-tekhnicheskiy institut im Kuznetsova
Siberian Physicotechnical Institute imeni Kuznetsov,
Tomsk

SKNTs

Severo-Kavkazskiy nauchnyy tsentr vysshey shkoly
North-Caucasus Scientific Center of Higher Education,
Rostov-on-Don

SNIIM

Sibirskiy gos NII metrologii
Siberian State Scientific Research Institute of
Metrology, Novosibirsk

TashGU

Tashkentskiy gos universitet
Tashkent State University

TGU

Tomskiy gos universitet
Tomsk State University

TIASUR

Tomskiy institut avtomatizatsii sistem upravleniya
i radioelektroniki
Tomsk Institute for Automation of Control Systems
and Radioelectronics

ToPI

Tomskiy politekhnicheskiy institut
Tomsk Polytechnic Institute

TsINTIkhimneftemash

Tsentral'nyy institut nauchno-tekhnicheskoy informatsii
tekhniko-ekonomicheskikh issledovaniy po khimicheskomu
i neftyanomu mashinostroyeniyu. Ministerstvo
khimicheskogo i neftyanogo mashinostroyeniya
Central Institute of Scientific and Technical Information
for Technical Economic Studies on Chemical and Petroleum
Machine Building. Ministry of Chemical and Petroleum
Machine Building, Moscow

TsNIIE

Tsentral'nyy NII "Elektronika"
"Elektronika" Central Scientific Research Institute,
Moscow

TsNIIGAik

Tsentral'nyy NII geodezii, aerofotos"yemki i kartografii
Central Scientific Research Institute of Geodesy, Aerial
Photography and Cartography, Moscow

TyuGU

Tyumenskiy gos university
Tyumen State University

UNTsIKh

Institut khimii Ural'skogo nauchnogo tsentra AN SSSR
Institute of Chemistry, Ural Scientific Center,
Academy of Sciences USSR, Sverdlovsk

UrPI

Ural'skiy politekhnicheskii institut
Ural Polytechnical Institute, Sverdlovsk

UzhGU

Uzhgorodskiy gos universitet
Uzhgorod State University

VilGU

Vil'nyusskiy gos universitet
Vilnius State University

VINITI

Vsesoyuznyy institut nauchnoy i tekhnicheskoy
informatsii
All-Union Institute of Scientific and Technical
Information, Moscow

ViPI

Vinnitskiy politekhnicheskii institut
Vinnitsa Polytechnic Institute

VISI

Voronezhskiy inzhenerno-stroitel'nyy institut
Voronezh Engineering Institute

VNIFTRI

VNII fiziko-tekhnicheskikh i radiotekhnicheskikh
izmereniy
All-Union Scientific Research Institute of Physico-
technical and Radiotechnical Measurements, Moscow

VNIIG

VNII gidrotekhniki im B.Ye. Vedeneyeva
All-Union Scientific Research Institute of
Hydraulic Engineering imeni B.Ye. Vedeneyev

VNIIM

VNII metrologii im Mendeleyeva
All-Union Scientific Research Institute of Metrology
imeni Mendeleyev, Leningrad

VNIIMS

VNII metrologicheskoy sluzhby
All-Union Scientific Research Institute of the
Metrological Service, Moscow

VNIIOFI

VNII optiko-fizicheskikh izmereniy
All-Union Scientific Research Institute of
Optophysical Measurements, Moscow

VNITsISPIV

VNI tsentr po izucheniyu svoystv poverkhnosti i vakuuma
All-Union Scientific Research Center for Studying the
Properties of Surfaces and Vacuums, Moscow

VolISI

Volgogradskiy inzhenerno-stroitel'skiy institut
Volgograd Civil Engineering Institute

VTsSOAN

Vychislitel'nyy tsentr SOAN
Computer Center, Siberian Branch Academy of Sciences
USSR

YeGU

Yerevanskiy gos universitet
Yerevan State University

ZhMI

Zhdanovskiy metallurgicheskiy institut
Zhdanov Metallurgical Institute

VI. AUTHOR INDEX

ABADZHYAN S V	43	APOLLONOV V V	13	BARKOVSKIY K P	7
ABDULLIN R M	19	ARAKELIAN S M	34,70	BARNA S	6
ABRAMENKO V A	64	ARBIYEVA Z KH	46	BARTA C	30
ABRAMOV A A	46	ARBUZOV B A	85	BARTENEVA O A	85
ABRAMOV V P	10	ARESHIDZE M G	101	BARYKIN S V	71
ABROSIMOV N V	84	ARGUNOVA T V	98	BASHKIN A S	25,26
ABSALYAMOVA E KH	84	ARISTOV YU V	41	BASMANOV V F	17
ACHASOV O V	84	ARKHIPKIN V G	103	BASOV N G	8,12,25
ADAMOVICH V A	24	ARLANTSEV S V	20		26,57,101
ADOMAYTIS E	80	ARNAUTOV G P	70	BATOG V N	86
ADZHAMOGLYAN P O	64	ARSENT'YEV I N	6,85	BATYAYEV I M	42
AFANAS'YEV A A	57	ARTAMONOV V V	85	BATYRBEKOV E G	18,71
AGALAKOV YU G	13	ARTEMENKO S B	70	BATYRBEKOV G A	18,71
AGANINA G A	46	ARTYUSHENKO V G	30	BAUDYS A	71
AGANOV A M	64	ARUSHANYAN L YE	34	BAZEV V M	85
AGAP'YEV B D	33	ARUTYUNOV YU A	57	BAYKOV E U	26
AGEKYAN V F	84	ARUTYUNYAN R V	96,97	BAYRAMOV B KH	86
AGEYEV A N	51	ASADULLINA R I	85	BAYTSUR G G	13
AGEYEV L A	80	ASAYENOK N A	2	BAZAROV YE N	70
AGEYEV V A	101	ASHCHEULOV YU V	61	BAZHENOV V V	97
AGEYEV V G	96	ASINOVSKIY E I	54	BEKETOV I YE	20
AGEYEV V P	24	ASKAR'YAN G A	101	BEKMURZAYEVA Z B	71
AGLADZE N I	42	ASOTSKEYA E A	76	BEKOV G I	86
AGRANAT M B	38	ASTADZHOV D N	20,21	BEKSHAYEV A YA	65
AKHMANOV S A	33,84,103	ASTAF'YEVA L G	55	BELAN V R	57
AKHMEDIYEV N N	60	ASTAKHOV A V	3	BELANOV A S	47
AKHSAKHALYAN A D	31	ASTAPCHIK S A	97	BELASHENKOV N R	3
AKHUNOV N	13	ATANASOV P A	99	BEL'DYUGIN I M	26,57
AKIMOV A V	80	ATEZHEV V V	24	BELEN'KIY M S	54
AKIMOVA I V	6	ATUTOV S N	80	BELENOV E M	51
AKMANOV A G	38	AVANESYAN S M	99	BELETSKIY V V	98
AKOPYAN R S	70	AVETISYAN YU O	38	BELKIN P N	98
AKSENOV V F	43	AVRUTSKIY I A	47,94	BELOGORSKIY V V	71
AKSENOV YE T	47	AXINTE C	94	BELOKONEVA YE L	1,3
AKTSIPETROV O A	38	AYVAZYAN YU M	85	BELOTSERKOVSKIY E N	71
ALAVERYAN R B	70	AZHNYUK YU M	85	BELOUSOV V N	39
ALEKSANDROV YE B	84	AZIMOV B S	38	BELOUSOVA I M	14
ALEKSEYEV A B	62	AZIMOV R K	103	BELOV A L	44
ALEKSEYEV A I	84			BELOV M L	54
ALEKSEYEV A S	80	BABAYEV I K	13,18	BELOVOLOV M I	48,60
ALEKSEYEV E I	70	BABENKO S M	44	BELYAYEV A B	63
ALEKSEYEV K N	33	BABIN P A	103	BELYAYEVA O A	71
ALEKSEYEV V A	84	BABIN S A	18	BELYY V N	40
ALEKSEYEV V V	70	BABONAS G	36	BEN' V N	57,58
ALENTSEV B M	43,64	BABONAS G A	34	BENDITSKIY A A	65
ALEYNIKOV V N	101	BABUKOVA M V	71	BERDYSHEV A V	81
ALFEROV ZH I	6	BACHERIKOV V V	47	BEREZHNOY A YE	32,71
ALIMARIN I P	84	BACHIN I V	34	BEREZOVSKIY V V	14,54
AL'TSHULER G B	2,96	BAGAYEV S N	11	BERMAN G P	33
AL'VARES-SUARES V A	80	BAGDASAROV KH S	94	BERTEL' I M	14
AMUS'YA M YA	34	BAGDASARYAN D A	38	BETEROV I M	62
ANAN'YEV V YU	18	BAGRATASHVILI V N	95	BETIN A A	58
ANAN'YEV YE G	40	BAKANOV D G	23	BEZHAN N P	4
ANAN'YEV YU A	27	BAKAYEV D S	13,28	BEZRODNYI V I	86
ANDREYEV A M	70	BAKHRAMOV S A	21	BEZRUCHKO V M	85
ANDREYEV S V	70	BAKOS J S	58	BEZUGLOV N N	62,85
ANDREYEV V I	64	BALAKHNIN A YE	64	BIRYUKOV A S	27
ANDRIANOV S N	36,37	BALKAREY YU I	34	BLAGODATOVA N B	65
ANDRUSHKO L M	47	BALKASHIN O P	32	BLAGODYREV A V	64
ANGEL'SKIY O V	70	BALTENKOV A S	34	BLAGOVESHCHENSKIY V V	86
ANIKEYEV I YU	40,57	BANDROVSKAYA I K	80	BLISTANOV A A	30
ANIKICHEV S G	27	BANKET V L	47	ELOKHA V B	80
ANISIMOV S I	108	BANSHCHIKOV A G	76	BLONSKIY I V	103
ANISIMOV V N	96	BARANKOV V V	21	BLUMBERG G E	90,91
ANTIPEKNO B M	2	BARANOV A N	23	BOBOVICH YA S	85
ANTIPOV O L	39	BARANOV A V	85	BOBRIK V I	64,65
ANTIPOV V N	13	BARANOV V V	12	BOBROV B D	58
ANTONISHKIS N YU	6,85	BARANOV V YU	20,24,96	BOBROV S T	58
ANTONOV V A	77,85	BARANOVA I M	38	BOCHKAR' YE P	48
ANTONOVA K T	64	BARANTSEV V V	28	BOGATOV A P	5
ANUFRIYEV A V	59	BARIKHIN B A	7	BOGATYREV V A	48
APANASEVICH P A	2,57	BARKOV L M	85	BOGDANKEVICH O V	7

BOGDANOV D D	86	BYKOV A M	48	DANILEYKO YU K	35,96
BOGDANOV N YA	94	BYKOVA O G	43	DANILYCHEV V A	12,18,25
BOGDANOV S V	40	BYKOVSKIY YU A	61	DAN'KO V P	72
BOGDANOV V L	86	BYKOVSKIY YU A	3,43	DARMANYAN A P	87
BOGOMOLOV V N	86	BYSHUYEVA G V	100	DARSKIY A M	61
BOHM J	81			DASHUK P N	28
BOLOTINA N P	98	CARBUNESCU E	34	DAVYDCHENKO A G	42
BOLOT'KO L M	25	CERVENA J	96	DAVYDOV B L	35
BOL'SHOV L A	39,96,97	CHAPLYGIN V I	93	DAVYDOV YU T	30
BONCH-BRUYEVICH A M	97	CHAPOVSKIY P L	81	DEDUSHENKO K B	4,43
BONCH-OSMOLOVSKIY M M	80	CHASHCHIN S P	29	DEGTYARENKO K M	25
BONDARENKO B V	103	CHASOVNIKOV S A	72	DEGTYAREVA V P	101
BONDARENKO S V	57	CHAYKIN A M	62	DELONE N B	103
BONDAREV B V	65	CHEBOTAREV G D	19	DEMCHUK M I	3
BONDARTSEV S YU	41	CHEBOTAREV V P	46	DEMIN A I	23
BORISEVICH L YE	27	CHEBOTAYEV V P	11	DEMIN V V	54
BORISEVICH V G	48	CHEBOT'KO I S	97	DEMKIN V N	30,65
BORISOV A V	19	CHEBURKIN N V	13,14,15,58	DEMOCHKO YU A	94
BORISOV B S	60	CHECHENIN N G	100	DEMOKRITOV S O	40
BORISOV YE N	85	CHECHENINA YE P	44	DENISHCHIK YU S	28
BORISOVSKIY S P	71	CHEKALIN N V	63	DENISOV A A	89
BORODIN V G	99	CHEKALINSKAYA YU I	44	DENISOV V I	34
BORODIN V M	62	CHEKIN S K	13	DENISOV V N	92
BORODULENKO G P	3	CHELNOKOV V YE	71	DENISYUK I YU	62
BOROVICH B L	20	CHEREDNIK V I	94	DENUS S	101
BOROVTSOV P V	72	CHERENKOV YE I	56	DERBOV V L	35
BORSHCH A A	58	CHEREPENNIKOV V V	41	DERYUGIN A A	24
BOSAMYKIN V S	17	CHEREUGIN V L	32,33	DERZHIYEV V I	10
BOTSMAN A V	62	CHEREZOV V M	22	DEVOYNO O G	97
BOYKO S A	18	CHERKASOV A S	42	DEVYATKO YU N	94
BOYKOV V N	89	CHERNAY A V	95	DEVYATYKH G G	40,48
BRAGINSKIY V B	72	CHERNOBROD B M	39	DIANOV YE M	35,39,40,47
BRAZOVSKAYA N V	34,81	CHERNOBRODOV YE G	87		48,49,60,103
BRAZOVSKIY V YE	81	CHERNOBROVIN V I	71	DIDENKO A N	25,28
BREZHNEVA S V	90	CHERNOMORDIN A I	7	DIK V P	51
BRODIN M S	81,103	CHERNOMORETS M P	25	DINMUKHAMETOVA L P	84
BRUYEV A S	20	CHERNOV P V	48	DINOV R V	45
BRYNZAR' V I	4	CHERNYAGO B P	2	DIVIN V D	32
BUBLYAYEV R A	48	CHERNYAKOVSKIY A F	3	DMITRIYEV A K	87
BUBNOV M M	46,48	CHERNYAVSKIY V A	83	DMITRIYEV A L	48
BUCHANOV V V	20	CHERNYAYEVA G A	98	DMITRIYEV A V	42
BUDAK V P	54	CHERNYAYEVA YE B	88	DMITRIYEV V A	53
BUDKEVICH B A	72	CHERNYSHEVA L V	3	DMITRIYEV V P	71
BUDNIK L I	27	CHESNOKOV M N	99	DMITRIYEV YE I	58
BUDZULYAK I M	99	CHESNULYAVICHYUS I I	7	DMITRIYEVA YE I	35
BUKHENSKIY A F	40	CHICHININ A I	72	DOBROTVOVSKAYA M V	96
BUKHENSKIY M F	44	CHIKISHEV A YU	88	DOBROTVOVSKIY S S	96
BUKOVSKIY B L	64	CHIKOVSKIY A N	93	DOBROV YE N	46
BUKREYEV V S	24	CHILINGARYAN YU S	34,70	DOBROVOL'SKIS Z	80
BULAKH B M	76	CHIRIMANOV A P	94	DOBRYNIN B M	73
BULAKOV S S	107	CHIRKOV V A	102	DOLGIKH V A	8,25
BULANIN V V	101	CHIRKOV V N	14,15	DOLGOV M V	60
BULGAKOV A T	80	CHISTYAKOV S A	98	DOLUKHANYAN T P	91
BULYSHEV A YE	34	CHISTYAKOVA L K	55	DONECKER J	103
BUNKIN F V	44	CHMEL' A	87	DONIN V I	18
BUNKIN S B	86	CHUDANOV V V	97	DOROFEYEV V G	97
BURAKOV V S	7	CHUGUNOV A V	87	DOVCHENKO D N	43
BURDEL' K K	100	CHUGUNOV A YU	12	DOVGALENKO G YE	29
BURMISTROV A V	97	CHUKANOV V N	51	DOVGOSHEY N I	100
BUROV A A	72	CHULYUKOV V A	32	DRABOVICH K N	35
BUSHUK B A	86	CHUPRYNA V A	65	DRAGANESCU V	94
BUTASHIN A V	3	CHURAKOV V V	14,16,17	DRAKIN A YE	6
BUTENKO A D	72	CHURBANOV M F	40,48	DRAVSKIKH Z V	41
BUTKEVICH V I	30,65	CHUREKOV V V	82	DROZDOV N A	84
BUTKOVSKIY O YA	39	CHURILOV S S	102	DROZHBIN YU A	12,69
BUTRIMOVICH O V	8	CZUB J	81	DUBININA YE M	38,104
BUTUSOV M M	3			DUBINOVSKIY A M	104
BUZHINSKIY I M	72	DAGMAN E YE	79	DUBITSKIY V YE	30
BUZULUTSKOV A F	48	DAMMANN E	31	DUBNISHCHEV YU N	73
BUZYKIN O G	97	DANELYUS R V	83	DUBOVSKIY P YE	9
BYCHKOV YU I	14	DANILEVICH O I	99	DUBROV V V	31
BYKOV A D	14,15	DANILEYKO M V	93	DUDAK I A	87

DUDAREVICH A L	7	GAD'MASHI Z P	30	GONCHARENKO A M	52
DUDCHIK YU I	2	GAERTNER K	95	GONCHAROV I G	5
DUDIN A YU	12	GAFNER A YE	61	GONCHUKOV S A	10,27,31
DUL'NEV G N	28	GAGARIN A P	97	GOPMAN A B	48
DUMAREVSKIY YU D	49	GAGARIN S P	54	GORBAN' I S	25
DUMITRAS D C	94	GALAKTIONOV V A	106	GORBARENKO V A	21
DURAYEV V P	6	GALAKTIONOVA N M	79	GORBATENKO A A	87
DURNEV V F	84	GALANOV YE K	87	GORBUNOVA T M	21
DUTOV A I	14,15	GALDIKAS A	80	GORDEYEV A A	40,57
DYAD'KIN A P	20	GALEYEV I G	15	GORDIYENKO V M	81
D'YAKOV V A	43	GALIY P V	96	GORDOV YE P	54
DYKMAN M I	35	GALKIN S L	3,73	GORELENOK A T	80
DYUZHNIKOV I N	49	GALKINA T I	80	GORELIK V S	81,87
DZHIDZHOMYEV M S	87,100	GALSTYAN V G	91	GORLIN G B	61
DZHOTYAN G P	58,87	GALUSHKIN M G	14,15,57,58	GORNYI M B	33
DZYUBA V A	98	GAMALIY YE G	101	GORODETSKIY I YA	42
DZYUBENKO M I	7	GAMZATOV N M	25	GOROKHOV V V	17
		GAPONENKO S V	83	GORONOVSKIY I T	56
EKMANIS YU A	2	GAPONOV S V	31	GORSHKOV V G	35
ESKOBILOV N B	86	GARBUZOV D Z	6,85	GORYACHEV B V	52
ESTRELA-L'OPIS V R	63	GAVRIKOV V F	25	GORYACHIN D A	15
EVENIGORODSKIY E G	73	GAVRILENKO V G	51	GOVORKOV S V	88
		GAVRILENKO V P	81	GRACHEV G N	17
FABRIKANT V A	104	GAVRILINA L K	26	GRANBCHAROV K	64
FAL' A M	93	GAYAZOV R R	102	GRATSIAOV K V	58
FARCAS I	94	GAYDA L S	73	GREBENSHCHIKOVA N I	85
FARNY YU	101	GAYGEROV B A	20	GRECHUSHKIN K V	39
FATEYEV N V	62	GENERALOV V I	66	GRI B A F	37
FAYZULLOV F S	57	GENKIN G M	44	GRIBKOVSKIY V P	52
FAZLIYEV A Z	45	GENKIN V N	49	GRIDNEV V A	60
FEDENEV A V	19	GERASIMCHUK A G	15	GRIGONIS R A	35
FEDORISHCHEV V N	22	GERASIMOV V B	7	GRIGOROV I V	76
FEDOROV A B	84	GERGEL' I V	14,54	GRIGORYAN G L	34
FEDOROV S V	15	GERGEL' YE N	32	GRIGOR'YANTS A V	34
FEDOROV V B	3	GES' I A	72	GRIGOR'YEV P V	54
FEDOROV V F	21,23	GESHEV P I	52	GRIGOR'YEVA G A	63
FEDOROV YU K	3	GEYNTS YU E	56	GRIGOR'YEVA YE V	30
FEDOSEYEV A I	23	GINZBURG V M	70	GRIMBLATOV V M	65
FEDOSOV V P	54	GITLIN M S	92	GRINENKO V M	93
FEDOTOVA N R	85	GITSU D V	4,104	GRISHCHUK L P	72
FEDULEYEV B V	74	GLADKOV S M	84,86	GRISHIN I A	40
FEFER YE M	90	GLADKOV YU P	78	GRITSIV V V	66
FELINSKIY G S	47	GLAUBITZ U	58	GROMOVA N B	71
FEOKTISTOV V A	26	GLAZACHEV B I	53	GRUBINA L A	92
FERDINANDOV YE S	54	GLAZKOV D A	40	GRUDININ A B	49
FETISOV S P	65,66	GLAZOV A I	46,49,66	GRUZINSKIY V V	25
FEYGEL'SON YE M	104	GLEBOV L B	71,81,99	GRYAZNEVICH V P	11
FILIPPOV S S	26	GLIKIN L S	21	GUBAREV A A	5
FILIPPOV V N	75	GLUKHIKH I V	14,15	GUBIN M A	11
FIMBERG T A	90,91	GOCHELASHVILI K S	52,58	GUDKOV A A	8
FINKEL'BERG V M	31	GOEDE O	81	GULYAYEV YU V	41
FIRSOV K M	55	GOEPEL K	73	GUNYAKOV V A	73
FIRSOV K N	13	GOETZ G	95	GURASHVILI V A	18
FISHMAN I S	13	GOETZ K	101	GUREYEV K G	19
FIUTAK J	81	GOL'DFARB I S	49,105	GURINOVICH A V	61
FOERSTER E	101	GOLGER A L	8	GURINOVICH I F	92
FOERSTER G	73	GOLOKOZ P P	41	GUR'YANOV A N	46,48,49
POFANOV YA A	11	GOLOVCHENKO YE A	35,47	GURZAN M I	93
POKIN A N	95	GOLOVIN A O	18	GUSAKOV G M	100
POLIN A K	81	GOLOVINSKIY P A	81	GUSENKOV S N	92
POMENKOV I V	3	GOLOVITSKIY A P	16	GUSEV S A	31
POMICHEV A A	2,60	GOLOVIZNIN V M	97	GUSEV V E	41,95,99
POMIN N A	24,106	COLOVKO L F	105	GUSEV V G	73
POMIN V M	35	GOLOVLEV V V	53	GUSEV V V	35
POMIN YE A	10	GOL'TSEV A V	86	GUSEVA M B	104
FORTOV V YE	96,100	GOLUB YA S	32,71	GUSHCHA A O	81
FRANTSESSON A V	77	GOLUBENKO G A	94	GUTOROV M M	54
FROLOVA N G	78	GOLUBETS V M	97	GUTS V V	66
FUCHKO V YU	22	GOLUBEV G	37	GUTU I	94
FURTSEV V G	93	GOLUBEV V S	87	GUYVA R T	98
FUTORYAN L M	46	GOLUBEV V S	13,16,95	GUYVA V A	98

HAEBNEL O	31	KALUGIN D YE	85	KHATYREV N P	65,67
HAERTIG TH	73,76	KAMALOV V F	38	KHAYDAROV A V	5
HAERKORN H	58	KAMENETS F F	57	KHAYTUN F I	32,33
HALWASS K	29	KAMINSKIY A A	1,3,4	KHAZANOV I V	39
HAUBENREISSER W	74	KAMINSKIY YU D	73,74	KHIZHNYAK A I	57,59
HEIMBRODT W	81	KAMRUKOV A S	8	KHIZHNYAKOV V	36
HELMIG N	62	KANDIDOV V P	52	KHIZHNYAKOV V V	36
HENNIGER U	5	KANEVA YE N	42	KHLESKOVA T N	105
GNATOWICZ V	96	KANKA J	49	KHLOPKOV YU V	101
HOFMANN D	73,76	KANTSER V G	104	KHODAKOV K A	97
		KAPITSKIY YU V	59	KHODAKOVSKIY V I	97
IGNATAVICHUS M	80	KAPLYANSKIY A A	80	KHODZHABAGYAN G G	3
IGNATKINA R S	43	KAPRALOVA G A	62	KHOKHLOV E M	16
IGNATOV S A	74	KAPTSOV L N	4	KHOLDAROV N KH	74,76
IGNATOVICH T N	66	KARABUT E K	22	KHOLIN I V	12
IGNAT'YEV S V	48	KARABUTOV A A	65	KHOLMOGOROV V YE	86
IGUMNOV YE A	14,54	KARABUTOV V G	86	KHOLODKEVICH S V	86
IL'YUSHKO V G	19	KARAGODOVA T YA	82	KHOLODNYKH A I	55
INOCHKIN M V	3	KARAJIAN G N	58	KHOMA M M	93
INOZEMTSEV V P	105	KARAPETIAN G O	74,88	KHOPIN V F	49
INSHAKOV D V	2	KARASEK M	49	KHOPOV V V	75
IOFFE L A	66,67	KARASEV V B	3	KHOTYAINTEV V N	81
IONESCU E H	6	KARASIK A YA	35	KHRAMTSOVSKIY I A	74
IONIN A A	18	KARATSYUBA A P	43	KHROMOV A V	65
IORDAN G G	104	KARAYAN A S	70	KHROMOV V V	97
IORDANIDI G K	92	KARELIN V I	17	KHUDYAKOV I V	63
ISAKOV G N	76	KARINSKIY S S	79	KHULUGUPOV V M	2
ISAYEV A A	20,21	KARLOV N V	16	KHURSHILOVA Z A	88
ISAYEVICH A V	7	KARLOV S P	56	KIKKARIN S M	41
ISHANIN G G	104	KARPECHEV V N	48	KIM V G	92
ISHCHENKO A A	82	KARPLYUK K S	47	KINDYAK A S	52
ISHCHENKO V N	46	KARPOV I L	21	KIREVINA G A	64
ISKAKOV I A	46	KARPOV O V	40	KIREYEV S V	11
ISKANDEROV N A	35	KARPOV V I	60	KIRILLIN A V	97
ITIGIN A M	105	KARPOV V M	14	KIRILLOV V A	68
ITSKOVICH O YU	31,38	KARPOV V P	89	KIRILLOVICH A A	3,5
IVAKIN YE V	57,58	KARPYCHEV N S	48	KIRILOV A V	22
IVANETS S S	97	KARTHE W	33	KIRKIN A N	53
IVANOV A P	51,52	KASATKIN V V	84	KIR'YANOV A V	3
IVANOV A V	48	KASCHNER C	95	KISELEV N I	40
IVANOV I G	23	KASHKAROV P K	100	KISLENKO V I	59
IVANOV M B	4	KASLIN V M	64	KISLETISOV A V	16
IVANOV N A	2	KASYMDZHANOV M A	103	KIZEVETTER D V	36
IVANOV O A	92	KATANAYEV I I	44	KIZHAYEV K YU	6
IVANOV S A	98	KATKOVA E I	9	KLABOCH L	71
IVANOV S V	44,87	KAUFMAN I KH	37	KLEMENTOV A D	8
IVANOV V A	9	KAUFMAN S A	32	KLEMENT'YEV V M	11
IVANOV V N	49	KAZAKOV S A	20	KLEVIT'KIY B G	50
IVANOV V V	6,85	KAZAKOVA L P	74	KLIMCHITSKAYA G L	101
IVANOV-OMSKIY V I	87	KAZARYAN M A	22,49	KLIMENKO I S	74
IVANOVA O YU	23	KAZENIN D A	56	KLIMKIN V M	22
IVANSHECHKINA M A	64	KAZYUCHITS N M	84	KLIMOV A B	44
ILRAYELIAN V G	70	KELL K YU	67	KLIMOVSKIY I I	8,22,44
		KEL'MAN V A	22	KLOCHKO V M	68
JAHN J U	74	KERIMOV O M	8,25	KLOCHKOV V P	88
JANNSON J	79	KETSLE G A	63	KLOKISHNER S I	42
JANNSON T	79	KHABIBULLAYEV P K	21	KLUGE YU	83
JELINKOVA H	96	KHABIBULLIN A KH	17	KLUSHIN V N	58
JOHANSEN H	62	KHACHATRYAN R A	64	KLYUCHAREV A N	62
JOHANSEN H H	25	KHADYYEV I KH	37	KNAT'KO M V	83
JOHASZ T	58	KHADZHI P I	36	KOBAL' V A	100
JULEA T	94	KHAIMOV S ZH	54	KOBILDZHANOV O A	5
		KHALFIN V B	6,85	KOCHAROVSKIY V V	38
KABANOV G L	33	KHANOV V A	56,71	KOCHAROVSKIY VL V	38
KACHER I E	100	KHARBERGER L YU	48	KOCHARYAN L M	34
KAPTANOVA O N	98	KHARITONOV YU A	88	KOCHETOV I V	18,24
KALINIKOS B A	51	KHARLAMOVA YE YU	70	KOCHUBEY S A	46
KALININ V P	15	KHARSIK V F	90	KOENIG R	68
KALININ YU A	66,67	KHASANOV G	86	KOGAN M N	97
KALINKEVICH A A	54	KHASANOV O KH	52	KOGAN YA D	95
KALINOVSKIY V L	67	KHASANOV T	76	KOKHANOV V I	55
KALMYKOV P V	46	KHASANOV M U	18,71	KOKHKHAROV A M	21

KOKODIY N G	69	KOTLYARCHUK B K	100	KUDINOV V I	40
KOKORA A N	16,97	KOTLYAROV V P	95	KUDRYASHOV I A	59
KOLAROV G V	54	KOTOV I R	75	KUDRYASHOV YU YU	40
KOLEROV A N	1	KOTOVSHCHIKOV S G	35	KUDRYAVKIN YE V	7
KOLESNIK A I	52	KOTYUK A F	66,71,105	KUDRYAVTSEV A B	92
KOLESNIKOV N N	88	KOVAL' N N	10	KUDRYAVTSEV N N	24
KOLESNIKOV P M	27	KOVALENKO S A	67,85	KUDRYAVTSEV V V	47
KOLESOV B A	92	KOVALENKO V S	105	KUDRYAVTSEV YE M	23,27
KOLOBKOV V P	93	KOVALEV I O	16	KUGAYENKO O M	30
KOLOBKOVA YE V	93	KOVALEV V I	57	KUKHAREV A V	47
KOLOMEYETS S D	74	KOVAL'SKIY N G	39	KUKHTA A V	70
KOLOMIYETS B T	74	KOVSHIKOV N G	51	KUKHTAREV N V	29,58,59
KOLOMIYETS T M	29	KOVTONYUK N F	49	KUKONIN A G	61
KOLOMNIKOV YU D	12	KOZACHENKO M L	67	KUKSENKOV D V	6
KOLOTYRKIN YA M	105	KOZHEVNIKOV N M	73	KUKUSHKIN I V	82
KOLUNOV A V	66,67	KOZIN G I	9	KUKUSHKIN V G	27,52
KOMARNITSKIY A A	100	KOZINTSEV M S	75	KULAK G V	40
KOMAROV V A	33	KOZINTSEV V I	55	KULAKOV S L	28
KOMAROV V S	108	KOZLOV B A	10,19	KULAKOVSKIY V D	89
KOMISSAROV A B	85	KOZLOV N P	8	KULESHOV N V	89
KOMISSAROVA I I	75	KOZLOV S A	67	KULEV G G	72
KOMPANEYTS A N	75	KOZLOV V V	33	KULIGIN A P	51
KONARSKI S	46	KOZLOVA YE K	95	KULIK M	75
KONDRATENKO P S	31,38,95	KOZLOVSKAYA I M	15	KULIKOV A O	23
KONDRAT'YEV V A	49	KOZLOVSKIY V I	5	KULIKOV V V	9
KONEV YU G	14	KOZLOVSKIY V V	50	KULISH N R	76
KONONOV I G	13	KOZUB V V	97	KUL'SKIY L A	56
KONONOV M V	36	KOZYREV V K	76	KULYASOV V N	84
KONOPLEV A N	80	KRAMIDA A YE	102	KULYUK L L	6
KONOV A S	46	KRASAVINA YE M	7	KULYUPIN YU A	32
KONOV V I	24	KRASNOGOROV A YU	32	KUMEYSHA N A	67
KONOVALOV I P	9	KRASNOPEROV L N	72	KUNTSEVICH B F	16,82
KONSHINA YE A	88	KRASNOV V A	75	KURBANOV K	1,3
KONSTANTINOV A N	60	KRASOVITSKIY D V	34	KURBATOV YE V	10
KONSTANTINOV A V	88	KRASOVSKIY A N	89	KURCHANOV A F	66
KONSTANTINOV V A	88	KRASOVSKIY V V	6,85	KURCHATOV YU A	105
KOPTEV V G	2	KRASYUK I K	96	KURDYUMOV S P	106
KOPYLOVA T N	25	KRAUKLIS A V	24	KURILO I V	100
KOPYTIN YU D	54	KRAUZE A S	89	KUROCHKIN V YU	16
KORDUMOV A I	72	KRAVCHENKO V F	8,19,22,28	KUSCH S	81
KORENCHENKO A YE	43	KRAVTSOV S B	101	KUSHNIR Z O	100
KORETS A YA	73	KRAVTSOV N V	3,28	KUTAKHOV V P	8
KORNEV A F	58	KRAVTSOV V YE	47,78	KUTSAK A A	28
KORNEV V V	89	KRAVTSOV YU A	39	KUTUZA B G	54
KORNEYEV D O	101	KRAYNOV V P	103	KUZ'MENKO V A	63
KORNEYEV N A	75	KREYNES N M	40	KUZ'MICHEV A I	31
KORNEYEV S S	60	KREYNGOL'D F I	82	KUZ'MICHEV A V	101
KORNILOV S T	15	KRISYUK V YA	69	KUZ'MIN G P	16
KORNIYENKO L S	3,48	KRIVENKOV V I	47	KUZ'MIN V A	63
KOROBOK A M	7	KRIVORUCHKO K A	52,96	KUZ'MIN V N	18
KOROBOK V V	60	KRIVOSHCHENKOV V A	59	KUZ'MIN V S	36
KOROLENKO P V	9	KRIVOSHLYKOV A YU	74	KUZ'MINA I P	91
KOROLEV I A	41	KRIVOSHLYKOV S G	50	KUZ'MINA M G	52
KOROLEV YU G	74	KRIVOV B I	79	KUZ'MINA YE G	42
KOROL'KOV V I	80	KRIVTSOV V M	99	KUZ'MINCHEV V M	98
KOROSTELEV B A	79	KRONBERG YE R	75	KUZNETSOV A A	32,33,50
KOROTAYEV O N	89	KROTKUS A	80	KUZNETSOV A L	25
KOROTCHENKO A I	98	KRUZHALOV V A	16	KUZNETSOV A M	78
KOROTFEYEV N I	84,88	KRYL' L A	46	KUZNETSOV A V	48
KORSAKOVA YE G	88	KRYUCHKOV S I	24	KUZNETSOV V I	43,55
KORSHIKOV V B	66	KRYUKOV A P	48	KUZNETSOVA T V	74
KORSHUNOV V K	97	KRYUKOVA I V	7	KUZYAKOV YU YA	93
KOSITSYN V YE	11	KSANDOPULO G I	92	KVACH V V	2,88
KOSOBURD T P	75	KSENOFONTOVA N M	8,92	KVAPIL J	42
KOSTERIN A V	101	KUBELKA J	42	KVASIL B	43
KOSTIKOV YU P	42	KUBYSHKIN A P	55,81	KVITEK J	96
KOSTIN V P	55	KUCHERENKO M G	63	KWIEK P	33
KOSTOLOMOV A F	68	KUCHEROV A N	97		
KOSTYSHIN M T	29	KUCHINSKIY A A	28		
KOSTYUK S G	99	KUCHINSKIY V I	6		
KOTEROV V N	13	KUCHUGURNYY YU P	95		

LABUDA S A	84	LYAKISHEV V G	14,15	MASTIKHIN V M	40,41
LAKHTIN YU M	95	LYASHKO O M	28	MATISOV B G	33
LANCRANJAN I	6,7	LYSENKO V S	32	MATLIS S B	78
LANTUKH V V	46	LYTKIN A P	18	MATSONASHVILI B N	92
LAPINER KH Z	30	LYUBAR' N N	44	MATVEYENKO A V	92
LARIONOV V P	98	LYUBIMOV V V	4,58,59	MATVEYEV A N	59
LARIONOV V V	52	LYUBIMTSEV V A	89	MATVEYEV M YU	87
LARKIN A I	61	LYUBINSKAYA R I	76,79	MATVEYEV O I	90
LATUSH YE L	19,102	LYULYUKIN V I	78	MATVEYEVA A V	28
LAVRISHCHEV S V	49			MATVIYENKO G G	55
LAVROV A P	41	MACHEYKO I O	97	MATYAGIN YU V	89
LAVRUSHIN B M	5	MADGAZIN V R	5	MATYUK V M	63
LAZARENKO A G	57	MAGARAMOV D A	46	MAVRIN B N	92
LAZAREV L P	75,76	MAGUN I I	70	MAVRIN V N	77
LAZARUK A M	59	MAK A A	59,79	MAYBORODA YU P	105
LAZUTKA A S	6	MAKAR O A	98	MAZAN'KO I P	10
LEBEDEV E A	74	MAKARKIN A I	72	MAZAVIN S M	48,49
LEBEDEV M P	98	MAKAROV V A	28	MAZING M A	102
LEBEDEVA T P	35,96	MAKAROV V G	9	MAZMANISHVILI A S	32
LEINE L	33	MAKHSUDOV B I	6	MAZUR A V	77
LEMBKE E	29	MAKIN V S	97	MEDIK V S	32
LEMESKO V V	82	MAKSIMOV L V	74,88	MEDVEDEV B A	35
LEMMERMAN G YU	21	MAKSIMOV V V	95	MEDVEDEV D K	13
LEONOV YE I	89	MAKSIMOV YU N	97	MEDVEDEVA L V	49
LEONOV YU S	26	MAKSIMOVA N T	89	MEDVEDOVSKAYA L A	98
LEONT'YEV V M	3	MAKSIMYAK P P	70	MELEDIN V G	73
LEPENDIN V P	41	MALEVICH V L	72	MELIK-BARKHUDAROV T K	36
LESHCHINSKIY L K	98	MAL'GOTA A A	99	MELIK-PASHAYEV D A	85
LESHKO O M	82	MALIMON I V	66	MEL'NIKOV L A	35
LESINA T M	85	MALKIN YA N	63	MEN CHU' VON	99
LESNOV I A	12	MALOV A N	74	MERKER W	31
LEVCHENKO A A	98	MALOV YU A	83	MERKULOV D G	12
LEVI A M	65	MAL'SHUKOV A G	89	MESHCHERYAKOV YU I	71
LEVIN M B	7,42	MAL'TSEV A A	41	MESYATS G A	10
LEVIN P P	63	MAL'TSEV A N	23	MEZHEVOV V S	16
LEVIN V V	48	MALYSH N I	76	MICHAILOFF M	73,76
LEVINSHTEYN M YE	5,71	MALYSHENKO S P	97	MICHEL B	79
LEYKO S T	55	MALYUGIN V I	36	MICSINAI T	55
LIBENSON M N	97	MALYUKIN YU V	36,37	MIGEL' L I	99
LIBERMAN A A	68	MALYUTA D D	16,24,96	MIGEL' V M	99
LICHKOVA N V	86	MAMAYEV A V	53	MIGULIN A V	55
LIDER K F	82	MAMYSHEV P V	35	MIHAILESCU I N	94
LIGACHEV A YE	98	MANAKOV S V	55	MIKHALEV M A	54
LIKHACHEV I G	4	MANICHEV I A	3	MIKHALEVSKIY V S	19,23
LIKHACHEV V A	71	MANKELEVICH YU A	26	MIKHAL'SKIY A I	96
LIPOVSKAYA M YU	47	MANOV S V	29	MIKHAYLOV A A	25
LIPOVSKIY A A	47	MANUYLOV K K	90	MIKHAYLOV A YE	28
LISITSA M P	76	MANYKIN E A	37	MIKHAYLOV I A	30,61
LISITSYN V S	68,95	MARASIN L YE	48	MIKHAYLOV S I	40,57
LITVINCHUK A P	85	MARCHENKO L V	62	MIKHAYLOV V P	3
LIVSHITS V YA	76	MARDEZHOV A S	76,79	MIKHAYLOVA T P	64
LOBACHEV V A	69	MARES J A	42	MIKHEYEV N D	13
LOBANOV A N	25	MAREYEV YU M	85	MIKHIN S P	30
LOBANOV B D	89	MARGOLIN A D	24	MILJANIC S S	77
LOBANOVA YE S	47	MARGOLIN L YA	102	MILL' B V	1,3
LOBOYKO A I	12	MARKIN A S	44	MILOSLAVSKIY V K	80
LOGACHEV V A	67	MARKOVA S V	21,22	MINAYEV YU P	96
LOGUNOV A N	27	MARKUSHEV V M	93	MINENKOV V R	13
LOGUNOV A V	86	MARTENS F	76	MININ V V	16
LOKHNYGIN V D	2	MARTSINKYAVICHYUS S	36	MINTSEV V B	100
LOMONOSOV A M	54	MARTSINKYAVICHYUS S A	34	MINYAYEV V A	98
LOTKOVA E N	9	MARTYNOVA V I	74	MIRGORODSKIY V I	41
LOYKO V A	51	MARTYNOVA YE N	81	MIRONCHUK A V	64
LOZOVSKIY A D	63	MARTYNOVICH YE F	42	MIRONOV A B	40,57
LUCHINSKIY D G	37	MARUNKOV A G	63	MIRONOV A V	68
LUCHNIKOV A V	35	MASANOVA N P	47	MIROSHNICHENKO S I	48
LUKIN A V	69	MASHAKOVA S M	92	MIROSHNIKOV M M	105
LUSHNIKOV A A	98	MASHCHENKO A I	9	MIROVITSKAYA S D	76
LUSHNIKOV S G	89	MASHCHENKO V YE	90	MIROVITSKIY D I	79
LUSKIN B M	31	MASHINSKIY V M	49,50	MISHAKOV V G	23
LUZANOV V B	47,78	MASLENNIKOV V G	73	MISHIN A V	74,76
LYAKH G D	23	MASLOV V V	7	MISHINA YE D	38

MITEV V M	76	NEMKOVA YE A	38	ORLOV YU N	95
MITSEL' A A	55	NERSISYAN S TS	34	ORLOVA O A	86
MITSEV TS	54	NESMELOV V V	76	ORLOVICH V A	2
MITYURICH G S	41	NESTERENKO A A	16	ORLOVSKIY V M	14,17
MNUSKIN V YE	39	NESTERKIN O P	54	OSADCHUK V S	32
MOCHER K	31	NESTEROV D A	35	OSIKO V V	92
MOGILEVA L M	42	NESTEROVA Z V	50	OSIPOV O I	97
MOGIL'NITSKIY S B	52	NETREBA P I	77	OSIPOV V V	14,17
MOGILYUK I A	84	NEUSTRUYEV V B	49	OSIPOV YU V	77
MOKHNATYUK A A	39	NEVSKIY YU YE	41	OSTAPCHENKO YE P	9
MOLEVICH N YE	10	NI A L	96	OSTAPCHUK L S	80
MOLODYKH E I	20	NIKIFOROV A YE	1	OSTROUMOV V G	1
MOMINYKH N N	38	NIKIFOROV V G	39,55	OSTROVSKAYA G V	75
MOREV P G	46	NIKISHIN S A	6	OSTROVSKIY S B	47
MOROZ T Z	51	NIKISHOV A I	82	OSUTIN A V	87
MOROZOV A V	8,22	NIKITCHENKO V M	7	OVCHINNIKOV V M	28
MOROZOV I A	27	NIKITENKO V A	91	OVCHINNIKOVA T A	84
MOROZOV N N	86	NIKITIN V A	49	OVECHKO V S	59,85
MOROZOV V A	71	NIKITIN V M	57	OZOLS A O	83
MOROZOV V B	86	NIKITIN V V	11		
MOROZOVA I N	93	NIKITIN YE V	67	PAKHOMOV A V	98
MOROZOVA I S	71	NIKOGOSYAN D N	46	PAL' A F	18
MORSHNEV S K	77	NIKOLAYEV S V	7	PALEYEV V I	83
MORY S	68	NIKOLAYEV V A	98	PALIVODA A P	67
MOSKALENKO S A	36	NIKOLAYEV V K	105	PALKIN A M	82
MOSKALENKO YE S	80	NIKOL'SKIY M YU	2	PANCHENKO V YA	44,45
MOSTINSKIY I L	78	NIKONOROV N V	71,81	PANESH A M	63
MOTYLEV S L	101	NIKONOVA Z S	47	PANKOV E D	104
MOYSA M I	97	NIKUL'CHIN A V	11	PANKOV V G	58
MOZHAROVSKIY A M	53	NIKUL'SHIN S F	91	PAN'SHIN I A	60
MRUZ V	101	NIZIYENKO YU K	39	PAPANYAN V O	37
MULDAKHMETOV Z M	63	NOGINOV M A	1	PARFENOV V G	28
MURADYAN A G	49,105	NOVAK I I	93	PARITSKIY L G	61
MURADYAN A ZH	36,87	NOVIKOV A D	35,59	PASHECHKO M I	97
MURANOVA G A	76	NOVIKOV A N	25	PASHININ P P	96
MURASHOV V A	92	NOVIKOV S S	24	PATRIN A A	84
MURAVSKAYA N P	49	NOVIKOV V D	44	PAVLENKO A V	47
MURAV'YEV A A	86	NOVODVORSKIY O A	93	PAVLOV E L	99
MURAV'YEV A V	4	NOVOKSHENOV V YU	55	PAVLOV S A	4
MURAV'YEV V V	59	NOVOSELOV V G	3	PAVLOV V A	73
MURINA T A	36	NOVOSEL'SKAYA A I	97	PAVLOVA I A	89
MURINA T M	69	NOVOZHILOV V A	90	PAVLOVICH V	101
MURZAKHANOV A Z	29	NOZDRIN V V	68	PAVLOVSKAYA N A	10
MUZYKA L N	84	NOZDRIN YU N	4	PAVLOVSKIY A I	17
MYAKININ V A	56	NUZHDIN I V	46	PAVL'YUK V I	100
MYAKOV V N	46			PCHELINTSEV A I	98
		OBOZNENKO YU L	41	PECHENOV A N	100
NABOYKIN YU V	36,105	OBUKHOV A S	67	PECHERSKIY O P	71
NADEZHKIN YU M	68,95	OBUKHOVSKIY V V	82	PENCHEVA V KH	48
NAGIBIN YU T	28	ODINTSOV A I	23	PENDYUR S A	8
NAGRABA S	101	ODULOV S G	59	PENIN S T	54
NAGY J	55	ODZHAYEV V	96	PERCHANOK T M	16
NAKHODKIN N G	97	OGANESYAN S G	43	PERELYGIN I S	89
NANIY O YE	28	OKHOTIN S V	70	PERMOGOROV S A	90
NAPARTOVICH A P	12,16,18,24	OKISHEV A V	2	PEROV P I	83
NARUTA V YE	7	OKOMEL'KOV A V	44	PERSIANTSEV M I	39
NASIBOV A S	5,100	OXS YE A	81	PERVEYEV A F	76
NAUMOV A V	43	OXSANICH A P	87	PESHIN S V	41
NAUMOV A YU	90	OKUNISHNIKOV O N	65	PESTOV E G	9
NAUMOV K P	60	OLEMSKOY A I	82	PETNIKOVA V M	90
NAUMOV V G	12	OLZOYEV I K	82	PETRASH G G	20,21,22
NAUMOVA I N	99	ONOPKO V V	100		49,105
NAZARYAN A O	63	ONOSHKO R N	58	PETROSYAN L S	36,87
NEBOL'SIN M F	55	ORAYEVSKIY A N	10,25,26	PETROV D V	41
NECHIPORENKO V N	93	ORAZOV K	53	PETROV G D	40
NEDOLUGOV V I	7	ORDIN A B	68	PETROV M V	42
NEFED'YEV L A	61	OREKHOVA V I	29	PETROV N S	53
NEGADAYLOV A A	66,67	ORISHICH A M	95	PETROV V I	85
NEIZVESTNYY I G	82	ORLOV A N	82	PETROV V M	25,28
NEKRASHEVICH YA I	45	ORLOV L N	45	PETROVSKIY G T	50,71,77
NEKRASOV YU V	87	ORLOV O A	79		81,99
NEMES G	94	ORLOV V K	7	PETROVSKIY V N	13,16,18
NEMILOV S V	74	ORLOV V M	54	PETRU F	77

PETRUNIN V A	82	POPA O A	77	RAMENDIK G I	90
PETUKHOV A G	7	POPIK YU V	80	RAMISHVILI N M	70
PETUKHOV A V	38	POPKOV V T	79	RAPOPORT YE S	68
PETUKHOV V O	14,17	POPOV A I	10,18,19	RASCH A	33
PEVTSOV V F	7	POPOV A K	103	RASPOPOV N A	89
PEVZNER YA B	64	POPOV M B	53	RASSKAZOV S A	33
PICHUGIN V V	18	POPOV V K	100	RASTOPOV S F	83
PIKULIK L G	83	POPOV YU M	60	RAUTIAN S G	39
PILIPETSKIY A N	35,39,59	POPOV YU V	48	RAYEVSKIY I M	101
PILIPETSKIY N F	53,83	POPOVA M N	42	RAYKHER M M	9
FILIPOSYAN R B	33	POPOVA T B	90	RAZHEV A M	46
PILIPOVICH V A	72	POPOVICH N S	104	RAZULOV I A	63
PIMENOV YU D	99	POPUSHOV V V	4	RAZUMOV A S	20
PINCHUK G A	78	PORETSKIY S A	93	RAZUMOVSKIY V N	77
PIRCH I I	98	PORTNOY YE L	6	REBANE I	90
PIROGOV N O	63	PORTNYAGIN A I	95	REBANE L A	90,91
PISARCHIK A N	82	POTAPOV V K	63	RED'KO T P	85
PISARCHIK T	101	POTERYAYEV A G	17	RED'KO V P	50
PIS'MENNY V D	18	POTIKHONOV G N	87	REGEL' V R	91
PITATELEV M M	44	POTSUNAS V	80	REMNEV G YE	98
PIVOVAR V A	17	POYZNER B N	73	RENUCCI M	93
PIVOVARCHIK V F	14	POZDNEYEV S A	25,26	REPIN P B	17
PIVOVAROV A V	39	POZHAR V E	40	RESHETIN V P	52,96
PIVOVAROV S S	89	PRAVILOV A M	62	RESHETKINA I V	85
PLATONENKO V T	25,43,65	PREOBRAZHENSKIY N G	34,90	RESHETOV V A	37
	81,100	PRESNIAKOV L P	106	RESHETOV V I	100
PLATONOV YE M	61,73	PRESNIAKOV YU P	70	REUTOVA T A	21,23
PLATONOV YU YA	31	PRIBYTKOV V A	90	REVA M G	7
PLESHANOV S A	90	PRILEPSKIKH V D	56	REVENOK V I	32
PLETNEV R N	42	PRISHIVALKO A P	55	REYAKINA L V	33
PLOTNICHENKO V G	40,48	PRIVALOV V YE	11,30,65	REZNICHENKO P V	88
PLOTNIKOV A F	60	PRIVALOVA T A	2	REZNIKOV P V	5
PLYAVENEK A G	5	PRIVIS YU S	1	REZNITSKIY A N	90
PLYUKHIN V G	63	PROKHOROV A M	2,3,10,13,28	RIGAN M YU	100
PLYUTA L M	77		35,39,47,69,96	RITUS A I	40
POBORCHIY V V	86	PROKHOROV A V	75	RITUS V I	37,82
PODANCHUK D V	72	PROKHOROV K A	39	RIZAK V M	93
PODCHERNYAYEVA I A	105	PROKHOROV V P	49	RODCHENKOVA V V	7
PODIL'CHUK N D	67	PROKHOROVA S D	89	RODICHENKO G V	72
PODKOLZINA I G	42	PROKLOV V V	41	RODIN A M	86
PODOBEDOV V B	92	PROSKURNEV S YU	74	RODIONOV G D	91
PODOBEDOVA L I	102	PROTASOV YU S	8	RODIONOV V I	14,15
PODPALYY YE A	60,61	PROTOPOPOV V V	106	ROMANENKO P F	29
PODRUGIN V N	95	PROTSENKO YE D	11,13	ROMANENKO V I	51
POGREBNIYAK A D	98		18,106	ROMANOV A V	12
POGREBNIYAK B N	75	PROVOROVA O G	29	ROMANOV G S	97
POHLACK H	50	PRYALKIN V I	43	ROMANOV I M	72
POKATILCOV YE P	35	PRZHEVSKIY S S	65	ROMANOV L A	16
POLESHCHUK V YE	4	PRZHIBEL'SKIY S G	97	ROMANOVA L I	72
POLETIMOVA A V	42	PSHENITSYN V I	74,76,77	ROMANOVSKIY O A	56
POLEVOY A V	63	PUDKOV S D	97	ROMASHKOV A P	43
POLISSKIY G N	42	PUKHLIY ZH A	3	ROSENFELD A	68
POLIVANOV YU N	39	PUL'KIN S A	73	ROSTOVSKIY V S	88
POLONSKIY L YA	102	PURETSKIY A A	64	ROTARU A KH	36
POLUKHIN V P	98	PUSHKAREV V A	102	ROTSCHALK M	33
POLUNIN YU O	22	PUSHKIN S B	20	ROY I N	55
POLUNIN YU P	23	PUSTOSHKIN A A	78	ROZANOV N N	36,59
POLUSHKIN I N	92	PUSTOVOYT V I	40	ROZHKOV O V	60
POLUSHKIN N I	31	PUTILIN E S	96	RUBANOV A S	57,58
POLYAKOV A V	57	PUTIN YU A	78	RUBINOV A N	86
POLYAKOV D G	87	PYATIN M M	46	RUBINOV YU A	13
POLYAKOV I O	83	PYATNITSKIY L N	102	RUBINSHTEYN V M	68
POLYAKOV S N	48	PYKHOV R L	23	RUD' YU V	32
POLYAKOV S YU	71	PYZIN G P	70	RUDEKO YE N	36,37
POLYAKOV V I	83			RUDIK K I	83
POLYANIN A D	80	RADAK B B	77	RUDNITSKIY YU P	3
POLYANSKIY P V	61	RADAUTSAN S I	6	RUMYANTSEVA N A	55
POLYANSKIY V K	61	RAGOZIN D S	84	RUNOV V K	84
PONOMAREV D I	9	RAGOZIN YE N	102	RUPASOV A A	101
PONOMAREV I V	20	RAKAUSKAS R I	17	RURUKIN A N	13,16
PONOMAREV N M	3	RAKHIMOV A T	26	RUSIN F S	20
PONOMAREV YU N	55	RAL'CHENKO V I	7	RUSOV V M	66

RUSSU YE V	6	SEMENOV S L	48	SHILEYKA A	36
RUTKIN O G	51	SEMENOV V YE	59	SHILEYKA A YU	34
RUZIYEV SH	63	SEMEANOVA L V	12	SHIL'NIKOV A V	80
RYABOV A S	77	SEMEANOVA T S	42	SHILOV S M	42
RYABTSEV A N	102	SEMIDETNOV N V	78	SHILOV V N	63
RYABUKHO V P	74	SEMIN S P	67	SHILYADOV S O	61
RYABYKIN V V	39	SEMINOGOV V N	37,99	SHINKEVICH S L	60
RYAZANTSEV YU S	80	SEMIOSHKO V N	58	SHIPULIN YU G	103
RYBALOV M A	95	SEMKN B V	13	SHIPUNOV V A	48
RYBALTOVSKIY A O	48	SENATSKIY YU V	6	SHIRYAYEV V S	48
RYBIN YU V	28	SENICHKIN A P	89	SHISHOV S I	9
RYBKA V	96	SERDYUKOV V I	91	SHITIKOV YE S	56
RYKALIN N N	108	SEREGIN A M	14,15,58	SHKADAREVICH A P	2,3
RYSA' A G	91	SFRGIYENKO A F	32	SHKEDOV I M	23
RYSAKOV V M	41	SERKIN V N	35,39,47	SHKUNOV V V	53,59
RYSANEK V	50	SEROV YU L	75	SHKURINOV A P	88
RYVKIN B S	37	SEVAST'YANENKO V G	24,106	SHLENOV S A	52
RZHANOV YU A	34	SEVAST'YANOV B K	1	SHLYAPTSEV V N	102
		SEVERIN V S	29	SHMAL'GAUZEN V I	59
SABOTINOV N V	20,21	SEYKOVSKAYA L A	93	SHMELEV V M	24
SABUROVA R V	37	SHABANOV V F	73	SHMIDT N M	80
SACHKOV V I	66	SHABUNINA G G	80	SHMYGLEVSKIY YU D	99
SADCHIKHIN A V	10	SHABUNYA S I	84	SHONIN L N	74
SAFONOV V P	39	SHACHKIN L V	12	SHOTOV A P	5
SAIDOV Z S	1	SHAGIDULLIN R R	85	SHPAK I V	68
SAKHAROV V A	73	SHAKIROV B G	38	SHPEYZMAN V V	80
SAKSEYEV D A	92	SHAKIROV I KH	85	SHTERNIN L A	64
SALASHCHENKO N N	31	SHALUPAYEV S V	41	SHTYNGART L M	50
SAMARIN A YU	25	SHANANIN R A	13	SHUBIN B G	13
SAMARSKIY A A	106	SHAPAREV N YA	23,102	SHULSKUS YU K	17
SAMARTSEV V V	36,60,105	SHAPIRO D A	18	SHUMAY I L	88
SAMOKHIN A A	98	SHAPIRO V YE	39	SHURGAL'SKIY E F	56
SAMOKHVALOV I V	55	SHAPOVALOV P S	52	SHUSTAKOV V YU	66,67
SAMOKHVALOVA N S	46	SHARANBEYAN K M	64	SHUVALOV V V	90
SAMORODOV V A	48	SHARF V	60	SHVEL V V	98
SAMOTUGIN S S	98	SHASHKOV V M	12	SHVETS V A	76,79
SAMSON A M	30,45	SHASTIN V N	4	SIDORCHUK S I	86
SAMSON B A	57	SHATALOV F A	50	SIDORENKO S L	65
SAMTSOV M P	8	SHATROV A D	51	SIDORIN A V	98
SAMTSOV P P	24	SHCHEBUNYAYEV A G	46	SIDOROV V A	3
SAPOZHNIKOV M N	91	SHCHEGLOV V A	25,26,57	SIGAYEV A N	51
SARKISOV G S	101	SHCHEGLOV V N	24	SILAYEVA N B	36,37,105
SARKISOV S E	1,3,4	SHCHEPKINA YE D	50	SILIN V I	53
SARYCHEVA T A	25	SHCHERBAKOV A G	89	SIL'NITSKIY A F	55
SAUTKIN V A	26	SHCHERBAKOV A I	92	SIMINEL A V	6
SAVCHENKO A N	89	SHCHERBAKOV I A	1,2,3	SIMONOV A P	55,63
SAVEL'YEV A D	24	SHCHUYKO M I	97	SIMONOV A V	43
SAVEL'YEV B A	52	SHEDOVA YE N	75	SINEL'NIKOV S P	29
SAVIN A I	49	SHEGAY C A	82	SINIY I G	89
SAVINOVA G V	76	SHELAYEV A N	28	SINYAVSKIY N M	35
SAVITSKIY G V	100	SHELEKHOV N S	61	SINYAVSKIY V I	78
SAVRANSKIY V V	22,28	SHELEMENTSEVA V K	73	SISAKYAN I N	50
SAYAKHOV R SH	39	SHELEPO A P	28	SITENKO A G	45
SAYECHNIKOV V A	92	SHELKOVNIKOV A S	11	SITKEVICH M V	97
SAZHINA N N	18	SHELOPUT D V	40,41	SITNIK D N	75
SCHLICHTING J	29	SHEPEL' B N	89	SIVOKON' V P	59
SEBRANT A YU	96	SHEREGIY YE M	82	SIZOVA N L	91
SEDYKH D A	50	SHEREMET'YEV A G	106	SKAKUN V S	10,19
SELEZNEV S N	65	SHEROZIYA G A	87,93	SKLIZKOV G V	6,101
SELEZNEV V N	60	SHERSTKOV YU A	1	SKOCHILOV A F	53
SELEZNEVA L A	44	SHERSTOBITOV V YE	15,58	SKOGOREV V P	106
SELISHCHEV S V	98,108	SHEVCHENKO A K	1	SKOPINOV S A	83
SELIVANOV YU G	5	SHEVCHENKO V A	25	SKREBOV V N	62
SEM M F	19	SHEVCHENKO V G	11	SKRIPACHEV I V	48
SEMAK D G	80	SHEVCHENKO YU N	9	SKURATOV V A	91
SEMENENKO A I	79	SHEVEL' S G	81	SLEPOY B KH	77
SEMENETS T I	59	SHEVEL'KO A P	102	SLEPUKHIN V K	42
SEMENOV A D	46	SHEVEL'KO V P	106,108	SLINKO V N	25,28
SEMENOV A YE	89	SHEYBUT YU YE	36,37	SLIVKA V YU	30,93
SEMENOV A YU	96	SHIBARSHINA G D	36	SLIWINSKI A	33
SEMENOV L P	55	SHIKANOV A S	101	SMAKOVSKIY YU B	24

SMELOV V S	60,61	STAROVOYTOV S F	96	TATARCHENKO V A	84
SMIRNITSKIY V B	6	STAROVOYTOV V S	17	TATARSKIY V I	108
SMIRNOV B M	63	STASHKEVICH A A	51	TAURAYTENE S A	74
SMIRNOV V A	1	STAVROV A A	2	TAVLYKAYEV R F	51
SMIRNOV V B	86	STEL'MAKH M F	60	TELEGIN L S	38
SMIRNOV V G	6	STEPANOV A A	26,57	TELESHEVSKIY V I	74,75
SMIRNOV V I	49	STEPANOV A I	58	TEODOROVICH Z S	21
SMIRNOV V O	74	STEPANOV A N	92	TER-AKOP'YAN G M	86
SMIRNOV V S	45	STEPANOV B I	107	TEREKHIN A V	9
SMIRNOV YE A	68	STEPANOV N S	51	TEREKHOV S N	92
SMIRNOV YU I	86	STEPASHKIN V N	56	TERENT'YEV V P	64
SMIRNOVA E A	27	STERIN KH YE	92	TERYAYEV YU N	66
SMIRNOVA S A	42	STOLYAROV S N	79	TESELKIN V V	56
SMIRONV V A	28	STOTSKIY A A	78	TESLENKO L YU	69
SMOLENSKIY G A	89	STOYANOV A V	82	TIBILOV A S	56
SMOL'SKAYA L P	42	STOYANOV D V	54	TIKHOMIROV S I	25
SMOL'YANINOV I I	79	STOYKOVA YE	54	TIKHOMIROV S V	32,46,49,51
SMORODIN A YU	66	STRATAN A	94		66,69,71,105
SNEGOV M I	42	STREL'TSOV A P	16,24	TIKHONCHUK V T	101
SNEZHKOVA G YU	58	STRIZHEVSKIY V L	59,85	TIKHONENKO V V	21
SOBEL'MAN I I	107	STROKAN' G P	9	TIKHONOV YE A	86
SOBOL' A A	92	STRONSKIY A V	29	TIKHONOVA N S	56
SOBOL' V P	31	STRUMBAN E YE	6	TIKUNOV A V	6
SOBOLEV A G	51	STUDENIKIN P A	2	TIMAKOV V A	86
SOBOLEV N N	9	STYSIN V YE	32,69,71,105	TIMASHKEVICH O G	46,49
SOBOLEV V B	57	SUETIN N V	26	TIMASHOV A V	11
SOCHIVKIN G M	87	SUKHANOV I I	11	TIMASHOVA L N	60
SOKOLOV A V	107	SUKHANOV V I	61	TIMERKAYEV B A	15
SOKOLOV N I	49	SUKHANOVA G B	21	TIMOFEYEV V B	82
SOKOLOV V I	37	SUKHAREVA N A	81	TIMOFEYEV V D	86
SOKOLOVSKIY A A	50	SUKHOBURUS I I	32	TIMOSHENKO N I	29
SOKOLOVSKIY S V	41	SUKHODOLA A A	25	TIMOSHENKO V N	69
SOKOL'SKIY A G	78	SUKHODOL'SKIY A T	83	TISHCHENKO A V	94
SOKOVIKOV V G	22	SUKHOMLIN V T	61	TISHCHENKO V V	81
SOLDATOV A N	22	SUKHORUKOV A P	38,59	TISNEK T V	61
SOLEZNOVA L A	22	SUKHOV A V	83	TKACHENKO L P	11
SOLNTSEV M V	54	SUKHOV L T	102	TKACHENKO T L	23
SOLODKOV A F	5	SULAKSHIN A S	28	TKACHENKO YE V	79
SOLODUKHIN A S	17	SULAKSHIN S S	25,28	TKACHUK A M	42
SOLOGUB V P	9	SULIMOV V B	49	TKACHUK G B	53
SOLOMATIN YU V	61	SULTANOV M B	64	TLEUZHANOV A YE	18
SOLOMONOV V I	23	SURKOV O L	69	TOBOLKIN A S	77
SOLOUCHUK I V	66	SURODIN M P	51,105	TOCHILIN S D	81
SOLOUKHIN R I	24,52,96,107	SURZHNIKOV V P	78	TOCHITSKIY S YA	14
SOLOV'YEV V S	32	SUSHKOV V P	43	TOKAREVA A N	39
SOLOV'YEV V V	50	SUSLIKOV L M	30	TOKAREVA I P	12
SOROKA A M	8,71	SUSLOV A I	17,93	TOKMAN I D	44
SOROKIN A A	83	SUVOROV A YE	34	TOKUNOV YU M	78
SOROKIN V A	65	SVAKHIN A S	94	TOLBINA L I	66,67
SOROKIN YE V	92	SVECHNIKOV G S	107	TOLEUTAYEV B N	88
SOROKIN YU M	55,75	SVERDLOV B N	6	TOLKACHEV V S	10
SOSKIN M S	59	SVIRIDENKOV E A	85,89	TOLMACHEV A I	59
SOSKIND YA	67	SVIRIDOV K A	58	TOLMACHEV G N	9
SOTNIKOV V N	41	SVIRINA L P	27	TOLMACHEV V A	74
SOTNIKOV V T	96	SYCHUGOV V A	47,94	TOLSTOSHEIN A YU	45
SOTSKIY B A	53	SYRBU A V	4	TOMASHEVSKIY YU F	64
SPASOV L	64	SYTENKO O G	45	TOPOROV YU G	84
SPENDIAROV N N	90			TOPOROV V V	86
SPIRIDONOV N V	97	TALIPOV SH T	93	TOTZAUER W	79
SPIRIDONOV V P	82	TAMANYAN G YU	25	TOVMASYAN A K	64
SPORNIK N M	73	TANANKO I A	98	TOVSTYUK K D	107
STADNIK V A	83	TANTASHEV M V	55	TRINCHUK B F	39
STANISHEVSKIY I V	92	TAPINSKAYA O V	94	TRNKA J	30
STANKEVICH YU A	97	TARAN M D	12	TROFIMENKO V V	12,69
STARICHENKO K M	1	TARANENKO L V	81	TROFIMOV A N	22
STARIK A M	53,83	TARANUKHIN V D	25,43	TROFIMOV V A	53,59
STARODUB V P	102	TARASENKO V F	10,19	TROFIMOVA YE M	62
STARODUBTSEV A I	20	TARASOV A A	4	TROITSKAYA L S	51
STARODUMOV A N	52,58	TARASOV G G	35	TROITSKIY B B	46,51
STAROSOTNIKOV M I	88	TARASOV YU I	82	TROITSKIY YU V	11
STAROSTIN A N	18	TARASOVA T V	95	TROSHIN A S	44
STAROV V S	65	TARSHINOV I V	72	TRUKHOV D V	38

TRUSHIN S A	17	VDOVIN YU A	28	YAKOVKIN I B	41
TSARYUK V I	93	VECHKANOV N N	46,48	YAKOVLENKO S I	10,44
TSEKHOMSKIY V A	81	VEKLENKO B A	53	YAKOVLEV V A	53,64,65
TSELINKO A M	12	VELCULESCU G	94		66,92
TSETER M YA	85	VELIKOTNYI M A	78	YAKOVLEV V I	40
TSVETKOV V YU	68	VELIKOVICH A L	37	YAKOVLEV V YU	78
TURCHANOVICH L K	48	VELITSKAYA YE L	77	YAKOVLEV YU O	35
TURKEVICH YU G	58	VENEVTSYEV YU N	87	YAKOVLEVA S V	83
TURKIN N G	18	VERENIKINA N M	60	YAKSHIN M A	60
TUROVETS S I	45	VERESH M F	102	YAKUBOVICH S D	5
TURSUNOV A T	86	VERESHCHAGIN N M	10	YAKUSHEV O F	64
TUTUBALIN V N	51	VERESHCHAGINA N G	93	YAKUSHKIN S V	11
TYAKHT V V	64	VERKHOVSKIY V S	25	YAMNOV A L	29
TYAPUNINA N A	100	VERKHOVSKIY YE B	88	YAMSHCHIKOV V A	13
TYKOTSKIY V V	20	VERKHALIS I YU	80	YANCHENKO S N	50
TYMCHIK G S	74	VERNIK S M	78	YANEV R K	106
TYUNIN V D	98	VESELA ?	77	YANOVSKIY A V	31
TYURIKOV D A	11	VEYKO V P	95	YANSON I K	32
TYUTYUNNIK V G	66	VIAR ZH F	102	YANSON M L	62
		VIKHAREV A L	92	YAROVA A G	12,69
UDARTSEV A M	92	VIKTOROV YE A	79	YARTSEV A I	29
UGLOV A A	97,98,108	VIKTOROVA YE N	86	YASHIN A N	36
ULANOV YE A	10	VIL'CHINSKIY A	101	YASHIN V YE	40,59
ULANOVSKIY M V	46,69	VINOGRADOV A V	102	YASHUKOVA N V	101
ULENIKOV O N	14,15	VINOGRADOV YE A	42	YATSENKO B P	16
UL'YANOV V A	16,30	VINOGRADOVA V S	85	YATSENKO L P	93
UMYSKOV A F	2	VISHNEVSKIY G YE	76	YATSENKO YU P	3
URSULYAK V D	66	VLASOV N G	31,62	YAVOR I P	75
USHAKOV S N	101	VLASOV R A	37	YEFIMKOV V F	57
USHAKOV V N	60	VOIGT P	31	YEFIMOV O M	99
USKOV A V	51	VOL'F A	60	YEFIMOV V F	69
US'KOV V M	97	VOLKOV A YU	23	YEFIMOV V M	31
USOV P A	31	VOLKOV V N	26	YEGOROV S A	43
USTINNIKOV V N	32,71	VOLOVSKI YE	101	YELAYEV V F	21
USTINOV N D	15,59,106	VOL'POV A L	59	YELINSON M I	49
USTINOVSKIY N N	12	VOREVODIN YU M	55	YELISEYEV A B	79
USTYUGOV V I	79	VOROB'YEV A YA	98	YELISEYEV P G	5,6
UTKIN-EDIN D P	80	VOROB'YEV S P	30,62	YELIZAROV A S	32
UVAROVA N V	25	VOROB'YEV V V	56,108	YELKIN N N	39
UYUKIN YE M	94	VOROB'YEVA L P	79	YELOVNIKOV S S	38
UZHINOV B M	7	VORONIN S P	2	YEMEL'YANOV V I	37,96,99
UZUNOV I M	52,58	VORON'KO YU K	92	YEMETS YE P	12,27
		VORONOV S A	92	YENGIBARYAN V A	43
VADKOVSKAYA T N	69	VORONTSOV M A	59	YEPIKHIN V N	21
VALAKH M YA	85	VORONTSOV S S	17	YERBEN I V	60
VALEYKO M V	92	VOROPAY YE S	8,92	YERMACHENKO V M	12,13,18
VAL'SHIN A M	38	VOSTRIKOV V G	12		21,37
VANIN V A	30	VOVCHENKO V I	96	YERMAKOV B A	33,69
VAPNIK V N	96	VOVK L V	86	YERMAKOV O N	43
VARAKIN V N	63	VOYTENKO I G	40	YERMAKOVA N V	3
VARDANYAN R S	53	VOYTIK M G	8	YERMALITSKIY F A	92
VARFOLOMEYEV A A	44	VOYTSEKHOVICH V S	93	YERMOLAYEV V L	89
VARGIN A N	10	VOZNESENSKIY V A	47	YERMOLAYEV V S	96
VARNAVSKIY O P	53	VOZNITSKIY M V	32,33	YERMOLOVICH I B	42
VARSHAL B G	92	VUCHKOV N K	20,21	YEROKHOVETS V K	60
VARTAPETOV S K	24	VYSOCHANSKIY YU M	93	YESENALIYEV R O	46
VARTMANN G	83	VYSOTINA N V	59	YESEPKINA N A	41
VASIL'CHENKO V G	48	VYSOTSKIY YU P	26	YESIKOV D A	38
VASIL'TSOV V V	13			YESIPOV L A	101
VASILYAK L M	54	WALTHER H G	31	YEVDOKIMOVA O N	4
VASIL'YEV A F	40	WELSCH E	31	YEVMECHIKOV N L	67
VASIL'YEV N N	2	WENDLER L	37	YEVVRUSHENKO G S	23
VASIL'YEV V V	60	WESZKA J	93	YEVSEYEV A V	64
VASIL'YEVA I G	92	WILL P	79	YEVSEYEV I V	37
VASIL'YEVA L K	77	WILLSCH R	74	YEVTIKHIYEV N N	79
VAS'KOV V A	10,21	WITZMANN A	95	YEVTVSHENKO N G	99
VASNETSOV M V	29	WUENSCH E H J	5	YUDENICH I S	67
VAYNER V V	23			YUMASHEV K V	3
VAYNSHTEYN L A	108	YACHNEV I L	14	YURAS S F	78
VAYNSHTEYN S N	5,71	YAGOVKIN S V	77	YURCHENKO A I	89
VAZHENIN V A	1	YAKIMENKO I YU	93	YURCHENKO N I	20
VDOVIN V G	78	YAKOVENKO N A	49	YURCHUK S V	25

YURKEVICH I I	27	ZHURAVLEV YU F	42
YUR'YEV M S	15,18	ZHURKOV S N	93
YUSHIN A V	13	ZIMIN A B	53
YUSHKOV YU G	25	ZIMIN L G	83
YUZHAKOV V I	43	ZIMIN YU A	59
		ZINENKOVA G M	100
ZABAZNOV A M	3	ZINOV'YEV P V	36,37,105
ZABELIN A M	13	ZLATAROV V K	45
ZABELLO YE I	86	ZOLIN V F	93
ZABOLOTNYKH A V	18	ZOLOTAREV M V	57
ZABOLOTSKAYA YE A	39	ZOLOTAREV V O	19
ZABOLOTSKIY A A	38	ZOLOTOREV M S	85
ZABOROV A N	62	ZOLOTOV YE M	51
ZABRODIN I G	31	ZORINA V B	72
ZADERNOVSKIY A A	79	ZOROV N B	93
ZADORINA YE N	76	ZOTOV S D	23
ZAGIDULLIN R SH	79	ZOTOV V I	35
ZAGINEY A A	100	ZOZULYA B I	84
ZAGORSKIY YA T	33	ZOZULYA N I	84
ZAGREBIN A L	10	ZOZULYA YU I	84
ZAKHARENKOV YU A	101	ZUBAREV I G	40,57
ZAKHAROV A I	48	ZUBKOVA L YE	39
ZAKHAROV S M	37	ZUBOV V I	99
ZAKS M B	84	ZUBRILIN N G	25
ZAKURDAYEV I V	93	ZUK J	75
ZAMURUYEV S N	15	ZURABYAN A Z	56
ZANDBERG E YA	83	ZUYEV V S	8
ZAPECHEL'NYUK E F	96	ZUYEV V V	56
ZAPESOCHNYY I P	102	ZUYEV V YE	108
ZAPOROZHETS YU B	100	ZUYKOV V A	37,60
ZARETSKIY D F	83	ZVEREV M M	7
ZARKEVICH YE A	49	ZVEREV S YE	99
ZARUBIN A A	61	ZVERKOV M V	4
ZARUBIN P V	15	ZVORYKIN V D	12
ZASAVITSKIY I I	92	ZWICK A	93
ZAVARTSEV YU D	2	ZYUL'KOV V A	37
ZAVOROTNYY S I	20		
ZAVORUYEV S M	17		
ZAV'YALOV V V	79		
ZAWISLAWSKI Z	79		
ZAYARNYY D A	12		
ZAYCHENKO O V	72		
ZAYTSEV N K	102		
ZEL'DOVICH B YA	38,83		
ZELENSKAYA T YE	62		
ZEL'TSER L YE	93		
ZEMLYANOV A A	56		
ZEMLYANSKIY V M	79		
ZEMSKOV K I	49		
ZEMSKOV YE M	58		
ZENKOV YU V	100		
ZHARIKOV YE V	2,3		
ZHELEZNYAKOV V V	38		
ZHEMERDEYEV O V	84		
ZHERDIYENKO V V	57		
ZHIKHAREV V N	80		
ZHILIBA A I	54		
ZHILIN V G	78		
ZHILYAYEV YU V	5,71		
ZHIRNOV A V	65		
ZHIZHIN G N	53,64		
ZHMUD' A A	65		
ZHMYREVA I A	93		
ZHOGA L V	80		
ZHUK N P	53		
ZHUKOV A I	24		
ZHUKOV YE A	91		
ZHUKOVETS ZH G	72,80		
ZHUKOVSKAYA A I	86		
ZHUKOVSKIY V V	7		
ZHULAY V A	90		
ZHURAVLEV V I	60		

DISTRIBUTION LIST

DOD AND JOINT ACTIVITIES

A015	2	DARPA
A105	1	OASD PA
A128	1	SDIO
A154	1	OUSDR (R&AT)
A340	1	JCS/J-5 MIL SEC
A353	1	JSTPS
B002	1	DIA/DD
B004	1	DIA/DI-1
B060	1	DIA/RTS-2A5 PENT
B079	1	DIA/DIC-2C
B140	1	DIA/DE-1 (GROUND)
B159	1	DIA/DT-5A1
B163	1	DIA/DT-5B
B177	1	DIA/DT-5
B311	1	DIA/DC-6
B327	1	DIA/VP-TA02
B351	1	DIA/RTS-3A4
B352	50	DIA/RTS-2F STOCK
B537	1	DIA/VP-TPO
B594	1	DIA/DB-1F
B618	1	DIA/DB-4D
B731	1	DIA/DX-6
B737	1	DIA/RTS-2B (LIB)
B762	1	DIA/DB-6E2
B780	1	DIA/DB-1D2

U.S. ARMY

C461	2	INFANTRY CENTER
C500	1	TRADOC
C509	2	BALLISTIC RES LAB
C512	1	ARMY MATERIEL CMD
C515	1	CHEMICAL R&D CTR
C521	1	ELECTRONIC PG
C523	1	ERADCOM/FI-A
C540	1	USASDC
C550	2	CECOM
C569	1	BRDEC (STRBE-HF)
C632	1	CHEMICAL SCHOOL
C633	1	ORDNANCE CTR & SCH
C641	1	AVIATION CTR & SCH
C646	1	CACDA
C667	1	USAJFKSWC
C683	1	INTEL CTR&SCH
C755	1	902D MIG
C768	4	ITAC (LIBRARY)

U.S. NAVY

D002	1	OP-91(DNM)
D028	1	NAVAIRTESTCEN PAX
D217	2	NAVWPNCEN
D218	2	NRL CODE 2627
D220	2	ONR
D246	2	NAVSWC CODE D22
D248	2	NAVSEASYS COM
D249	2	NAVPGSCOL
D258	1	DTNSRDC
D424	1	NAVAVIONICEN IND
D506	1	COMNAVSPACECOM
D553	1	NAVSPASUR
D785	1	NSGSA WASHINGTON
D947	1	NIC-52

U.S. AIR FORCE

E021	1	DET-1, AFIS
E280	1	AFTAC/DOI
E303	1	USAF/INKL
E403	1	AF SYSTEMS CMD/INA
E404	2	AEDC/DOTI
E407	1	BALLISTIC MSL OFC
E408	5	AF WEAPONS LAB/IND
E411	5	AERONAUT SYS DIV
E413	2	ELEC SYS DIV/IND
E414	1	WSMC/SPX (AFCS)
E427	2	ROME AIRDEVCTR-INA
E429	1	HQ SPACE DIV/IND
E452	1	CADRE/WGOI

UNIFIED AND SPECIFIED COMMANDS

G005	4	ASPACECOM/INXS
H005	1	USCINCEUR
H300	1	ODCS IN(USAREUR)
H527	1	HQ 8TH INF DIV
J515	1	FICEURLANT
K300	1	IPAC (LIBRARY)
K320	1	USARJAPAN
L040	1	SAC 544 SIW/DAA
L041	1	544 IAS/IAR
L051	1	544 IAS/IAI

OTHERS

P002	2	NPIC/IB
P005	2	DOE/DASI
P007	1	DOE/NV/SSD/COCO
P015	3	NPIC/IEG/MSL&C3
P055	6	CIA/OCR/DSD/DB
P090	5	NSA
Q008	3	NISC
Q420	10	FTD/SIIS
Q592	4	FSTC (IS-1)
Q619	5	MSIC REDSTONE
R085	5	NASA
S003	1	SANDIA NAT LABS
S013	1	LLL
S030	3	FRD LIB OF CONG
S085	1	ORGDP

95 CUST. 208 COPIES

MICROFICHE

DOD AND JOINT ACTIVITIES

B352	25	DIA/RTS-2F STOCK
U.S. ARMY		
C500	1	TRADOC
C617	2	CONCEPT ANLYS AGCY

U.S. AIR FORCE

E706	1	HQ ESC/INAM
------	---	-------------

UNIFIED AND SPECIFIED COMMANDS

G005	1	ASPACECOM/INXS
------	---	----------------

5 CUST. 30 COPIES